CNNC
Rössing Uranium
Working for Namibia

RÖSSING URANIUM

REPORT TO STAKEHOLDERS 2019

www.rossing.com www.rossingfoundation.com www.cnnc.com.cn

The open pit of the Rössing Uranium mine has been mined since the early 1970s with the first production of uranium delivered in 1976. The uranium located in Rössing's mining licence area is embedded in very hard and abrasive granitic rock, known as *alaskite*. The open pit is currently 3 km long, 1.5 km wide and 390 m deep.

Contents

About this report

This report aims to give readers an overview of the activities of Rössing Uranium Limited (Rössing Uranium) from January to December 2019, including our interaction with society, the economy and the environment.

The report offers locally relevant information about our business and aspects raised during the year. We believe in open communication and transparency and simultaneously instil a culture of sustainable development throughout our company.

We would appreciate your feedback on the content in this report. You can send us a text message to Tel. +264 81 143 3627; send an e-mail to RUL.communications@rossing.com.na; contact us via our website at www.rossing.com, or phone the Communication section on Tel. +264 64 520 9111.

Front page: The Processing Plant is responsible for the extraction of uranium from mined ore through a number of stages to produce uranium oxide (U_3O_8). This product is securely packed and shipped to our customers for further conversion. The aim of the plant is to produce targeted quantities of uranium oxide in the most efficient and safe manner possible. The Final Product Recovery building (blue building in centre of photo) is where the uranium oxide is drummed.

About Rössing Uranium

Uranium was discovered in the Namib Desert in 1928, but it was not until intensive exploration in the late 1950s that much interest was shown in the area. After discovering numerous uranium occurrences, mining company, Rio Tinto, secured the rights to the low-grade Rössing deposit in 1966. Ten years later, in 1976, Rössing Uranium, Namibia's first commercial uranium mine, started production, celebrating its 43rd year of production in 2019.

Today, Namibia has two significant uranium mines (Rössing Uranium and Swakop Uranium, after the Langer Heinrich Uranium mine was placed in care and maintenance during 2018), which together provide 11.0 per cent of the world's uranium oxide output; in 2019 Rössing Uranium produced 3.9 per cent of the world's output.

The mine has a nameplate capacity of 4,500 tonnes of uranium oxide per year and, by the end of 2019, had supplied a total of 137,537 tonnes of uranium oxide to the world.

The mine is located 12 km from the town of Arandis, which lies 70 km inland from the coastal town of Swakopmund in Namibia's Erongo Region. Walvis Bay, Namibia's only deep-water harbour, is located 30 km south of Swakopmund. The mine site encompasses a mining licence and accessory works areas of 129.79 km^2, of which 25 km^2 is used for mining, waste disposal and processing.

Mining is done by blasting, loading and hauling from the open pit before the uranium-bearing rock is processed to produce uranium oxide. The open pit currently measures 3 km by 1.5 km, and is 390 m deep.

Map of the Erongo Region indicating the location of the Rössing Uranium mine.

A new era for Rössing Uranium

Leading in a new era of optimism for Rössing Uranium, China National Uranium Corporation Limited (CNUC) became the new majority shareholder in Rössing Uranium, the world's longest-running open-pit uranium mine. This follows the sale of Rio Tinto's 68.62 per cent shareholding to CNUC on 16 July 2019. CNUC is a subsidiary of state-owned China National Nuclear Corporation Limited (CNNC).

The rest of Rössing Uranium's shareholding remains unchanged. The Namibian Government has a shareholding of 3 per cent and it has the majority (51 per cent) when it comes to voting rights. The Iranian Foreign Investment Company (IFIC) is a passive legacy investor in Rössing Uranium, holding a 15 per cent stake that goes back to the early 1970s in the financing of the mine. The Industrial Development Corporation of South Africa owns 10 per cent, while individual shareholders own a combined 3 per cent shareholding.

At the hand-over event (depicted in the photographs on this page) on 25 July 2019, Mr He Zixing, Vice President of CNNC, paid tribute to all of Rössing's stakeholders for their historical contributions to the mine.

Now, as part of a fully-integrated nuclear power giant, a new era has been ushered in for Rössing Uranium, bringing with it all the benefits of shared cooperation. The positive implications of this in terms of extending the life of the mine and what that means with regards to the continued employment of the mine's 1,000 employees, is evident.

Top and bottom: Welcome, CNNC… On 25 July 2019, at a special event at the Rössing mine site, the mine was handed over to its new majority shareholder, CNNC. The event was celebrated by dignitaries from CNNC, CNUC, the Namibian Government, diplomatic corps, Rio Tinto, contractors and employees.

MD's message

Dear stakeholders

Welcome to Rössing Uranium's Report to stakeholders 2019. This report explains our mining operations and the approach we take in what we do. It also outlines how we performed in 2019 as measured against our key drivers.

Our stakeholders
This report is aimed at all our partners and stakeholders who include private citizens and their communities as well as non-governmental organisations, small-scale enterprises and multinational corporations. Thus, the benefits of our operations are felt locally, nationally, across the African continent and internationally.

A new era of optimism
2019 will be remembered as the beginning of a fruitful new era in Rössing Uranium's rich history. The change of majority shareholder marks a historic landmark and ushers in a new phase of optimism and prosperity for the mine.

As the world's longest-operated uranium mine and one of the most influential uranium mines in the world, Rössing has made major contributions to the international safe use of nuclear energy over the past 43 years. Now, as part of a global player and the internationally influential China National Nuclear Corporation Limited (CNNC) group, Rössing and our employees can look forward to an exciting future.

As the Vice President of CNNC, Mr He Zixing, stated in his message at the handover event, the most important significance of this cooperation is that the strong nuclear power market of China will provide opportunities and guarantees for Rössing to keep long-term, stable and sustainable development going in Namibia.

But it is not only our employees that will benefit. This new partnership also opened a new world in terms of shared knowledge and experience in the specialist field of nuclear power. We have already witnessed the effect of this cooperation when we explored the advantages of using downhole logging methods in our ore sampling activities — read more about this positive development later in this report.

Achievement: safety performance
Confirming our commitment to working safely and achieving zero harm, we are proud of our safety performance in 2019: the mine recorded an All-Injury Frequency Rate* (AIFR) of 0.49 for the year, against a target of 0.61. This is the second-best safety performance in the history of the mine — another important milestone for Rössing.

Confirming this achievement, we won the Chamber of Mines of Namibia's best safety award in the operating mines category — a proud accomplishment.

Sustaining our business
In 2019, we increased the mining of rock from the open pit with 13 per cent, from 19.8 million tonnes in 2018 to 22.4 million tonnes in 2019. We milled 8,006,058 metric tonnes (2018: 8,851,288 metric tonnes) of ore, leading to a production of 2,449 tonnes compared with 2,479 tonnes in 2018.

* All-injury Frequency Rate (AIFR) derived from the total number of all injuries (i.e. medical treatment cases, lost-day injuries and restricted work-day injuries) per 200,000 employee hours worked.

Revenue was in line with 2018 at N$2.82 billion. Lower sales volumes were largely offset by a more favourable exchange rate. However, a 15 per cent reduction in operating costs had a positive impact on profits before tax. The reduced costs largely contributed to an improved net profit after tax from normal operations of N$503 million (2018: N$166 million).

As a major employer and a purchaser of goods and services, Rössing's contribution to the economic development in Namibia, and more specifically in the Erongo Region, is significant. In 2019, our total expenditure for goods and services for our operations amounted to N$2.72 billion (2018: N$2.49 billion), of which 75 per cent was spent with Namibian-registered suppliers. The bulk of what we spend in Namibia remains in the Erongo (43 per cent) and Khomas (44 per cent) regions.

In conclusion

A word of appreciation to the Minister of Mines and Energy in 2019, Hon. Tom Alweendo, for his support during the transition process on behalf of the Government of Namibia.

I would also like to thank our employees for their hard work and positivity.

Thank you to all our stakeholders for their interest in our business. Please feel free to contact us for any comments or inputs to improve our annual report to you.

Johan Coetzee
Managing Director
30 April 2020

2019 at a glance

Economic viability

Economic viability

203% ↑

We increased our profit from normal operations from N$166 million in 2018 to N$503 million, an improvement of 203 per cent.

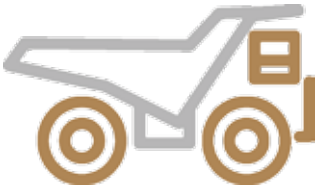
Fixed investment

N$193m

Our fixed investment for the reporting year totalled N$193 million, which is evidence of our confidence in the future of Rössing Uranium.

Product stewardship

Tonnes of rock mined



13% ↑

We mined 22.4 million tonnes of rock in 2019 compared with 19.8 million tonnes mined in 2018, which is 2.6 million tonnes (13%) more.

Uranium oxide produced

30t ↓

We produced 2,449 tonnes of uranium oxide, which is 30 tonnes less than 2,479 tonnes drummed in 2018.

Environment

Improved freshwater usage

10% ↓

Actual consumption of fresh water in 2019 was both 10 per cent below target and 2018 consumption.

Recycled water as percentage of freshwater usage

62%

The savings in freshwater consumption were made possible through continuous improvement efforts in our recycling methods, which attributed 62 per cent of the total water usage.

Social: People

Payments in salaries and wages

4.6% ↑

We increased payments to our employees in salaries and wages with 4.6 per cent, from N$733.4 million in 2018 to N$767.3million in 2019.

Our employees

1,000

We provide employment for 1,000 people, of which 98.7 per cent are Namibians, and only 1.3 per cent foreign employees. A total of 178 (17.8%) are female employees. An average of 1,029 contractors work daily at the mine site.

Social: Communities

Investing in communities

100% ↑

We increased our investment to our surrounding communities by 100 per cent, from N$13 million in 2018 to N$26 million in 2019.

Teachers and learners benefitted

20,786

teachers and learners benefitted

A total of 498 teachers benefitted from the Rössing Foundation Teachers Support Programme. In addition, 107 Pre-primary learners, 335 Junior Primary learners, 6,868 Senior Primary learners, 3,082 Junior Secondary learners and 9,896 Senior Secondary learners benefitted from the Rössing Foundation's programmes.

Governance

Board and Board committees

Rössing Uranium has a unitary board and the roles of the Chairperson and Managing Director are distinct and separate. The Audit and Risk Committee and the Nominations and Remuneration Committee assist the Board in the execution of their duties.

Accepted the NamCode

Rössing Uranium subscribe to international best practices of good corporate governance. Effective from 1 January 2014, Rössing Uranium accepted the NamCode, which is the Corporate Governance Code for Namibia, based on international best practices and the King Code of Governance for South Africa, 2009. Deviations from the NamCode are listed.

Leadership team

Rössing Uranium's leadership team consists of the Managing Director and four General Managers in charge of the four focus areas of our business. They are all experienced in their respective fields.

(From left to right) Leadership team as at 28 February 2020: Zhenqun (Peter) Fang (General Manager: Organisational Resources), Shaan van Schalkwyk (Chief Financial Officer), Johan Coetzee (Managing Director), Liezl Davies (General Manager: Operations) and Edwin Tjiriange (General Manager: Asset Management and Projects). (See the Rössing website www.rossing.com for any changes in leadership team.)

Our sustainable development approach

Focusing on the issues that matter most

Sustainable development is the distinctive, significant and characteristic centre of our overall approach to business.

Driving the integration of sustainable development at Rössing Uranium are the six themes highlighted below. These themes form the framework on which our business is conducted.

Everything we do is in line with the generally accepted definition of *sustainable development*, namely development that meets the needs of the present without compromising the ability of future generations to meet their needs.

This suggests that meeting the needs of future generations depends on how well we balance social, economic and environmental needs when making decisions today. The aim of sustainable development is therefore to seek out win–win situations that can achieve environmental quality and increase economic wealth and social well-being, today and tomorrow.

Our sustainability vision remains focused on:

- creating long-lasting positive effects for the people of the Erongo Region and Namibia;
- building capacity to ensure that we contribute to the future well-being of our employees;
- minimising negative impacts and optimising positive ones; and
- maintaining our reputation as a responsible corporate citizen of Namibia.

When conducting our business we ensure that we maintain a balance in the way we:

- use our assets — both our own resources and environmental resources — to reflect our integrated approach in terms of profit, people and planet;
- contribute positively to the needs of society by providing support to communities without creating dependency; and
- generate economic wealth.

ECONOMY
Economic viability
To provide the best returns on our shareholders' investment, we need to understand the long-term demand for our product, as well as the cost, resource availability and value creation associated with that demand. Economic viability also ensures that we continue to make significant contributions to Namibia's economy and her people in various ways.

ENVIRONMENT AND PRODUCT STEWARDSHIP
Product stewardship focuses on expanding our understanding of the impact of our product on society by working with all interested and affected parties.

Environmental and asset resource stewardship
We aim to be the leader in environmental stewardship in Namibia and to maintain our reputation as a responsible corporate citizen. This can be achieved by understanding and appreciating our natural resources, both biotic and abiotic, utilising them sustainably, and creating a net positive impact.

GOVERNANCE
Corporate governance and compliance
We strive to be transparent and proactive in all our business operations. To this end we have auditable business systems in place which form the backbone of good corporate governance.

SOCIAL
People
Our workforce is central to our business. This means ensuring a safe and healthy workplace geared for human resource development in order to attract and retain employees, while maximising our contribution to their well-being.

Communities
We implement long-term community development plans to focus on improvement in quality of life, as operating within a sustainable community provides our business distinct benefits, and an important part of that is good community relations.

Marketing our product

Rössing Uranium produced 2,449 tonnes of uranium oxide in 2019, which is 30 tonnes less than the 2,479 tonnes drummed in 2018. The black drums that can be seen are the ones that we fill with approximately 400 kg of uranium oxide each. The full drums are sealed and then packed in sea-going steel containers on site, transported to Walvis Bay harbour and then exported to our customers.

Market overview: 2019

As the market entered into 2019, the spot uranium price had already been falling from its highpoint US$29 per pound reached at November 2018.

While some believed the market still had upward momentum towards the US$30 range per pound level, the spot price continued to slip to US$24 per pound in May 2019 and remained within the range of US$24-$26 per pound towards the end of the year.

At 56.3 million pounds equivalent U_3O_8 traded, total spot volume in 2019 has slipped from the record-breaking pace set in 2018, but still sits in second place for the all-time annual volume record.

Throughout 2019, despite the declining spot price, the term indicator held firm at US$32 per pound, which reflects the general market view that longer-term supplies are not realistic at today's low spot price levels.

Several factors impacted on the market situation during 2019. The foremost one was the various trade issues. Although the United States (US) Department of Commerce's Section 232 investigation existed before 2019, with an expected outcome in July, buyers (including end-users, traders and investors) slowed down their procurement pace with limited purchasing, which had been very discretionary and origin specific.

> "A long-term price recovery is expected, but may take another five years. Moderate demand growth and subdued supply will drive this gradual price appreciation. Inventories are not expected to decline, but they are not expected to increase as strongly as over the past decade.

Surprisingly, US President Donald Trump decided in mid-July not to pursue import restrictions based on the Section 232 investigation, and instead to create a Nuclear Fuel Working Group tasked with finding ways to enhance national security through improvements to the domestic nuclear fuel industry. Disappointingly, the spot price did not react to this decision as expected.

Tension between the US and Iran increased, potentially causing new US sanctions on entities involved in Iran's nuclear power programme. At the same time, the US started negotiations with Russia over a possible new Russian Suspension Agreement. Both these events are likely to have prolonged effect on future Russian nuclear fuel supply into the US.

Lastly, nuclear fuel trade was also not immune to the US-China trade war, as the Trump administration added a new 25 per cent tariff on Chinese imports of enriched uranium products (EUP) into the US.

Another factor putting pressure on the spot price was erratic buying behaviours. With Cameco's McArthur River mine still in care and maintenance, expectations were for Cameco to maintain their bidding pace from 2018, which pushed the price up to US$29 per pound level. However, Cameco changed their procurement tactic and bought discretionarily and quietly.

Moreover, investors — the main purchasing force in 2018 — were much less active in the market during 2019. Only UPC publicly procured a few hundred thousand pounds at US$26 per pound level, and Yellow Cake PLC absorbing an additional 1.175 million pounds from Kazatomprom at US$25.88 per pound. This is a much smaller amount compared with the 8 million pounds procured by Yellow Cake PLC in 2018.

On the supply side, the 2019 global uranium production is estimated to have a net increase of 2.5 million pounds compared with 2018. The slight increase in 2019 was mainly attributed to several mine projects in Kazakhstan, as well as the Husab mine in Namibia.

Shortfall between production and demand was well covered by inventory draw-down and other secondary supply.

Nevertheless, the global uranium supply continued its rationalisation, as output from various other parts of the world fell, including the processing of Ranger stockpiled ore in Australia and US-based ISR production.

Furthermore, Kazatomprom announced their decision to extend their production cut by 20 per cent through to 2021 against its planned level, while Orano announced it will cease production from COMINAK in Niger in March 2021 due to resource depletion.

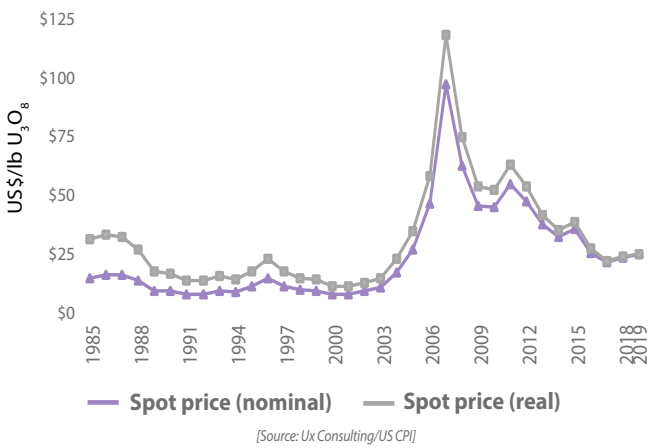
On the positive side, 2019 also witnessed a series of positive news events on nuclear development. China, for the first time since 2016, finally re-launched its approval for new projects and construction with at least four reactors having been approved (two at CNNC's Zhangzhou site and two at CGN's Huizhou site). Concrete has already been poured for some of the reactors.

In France, the country's energy policy was modified, delaying the timeline of planned reduction of nuclear power in the share of its electricity mix to 50 per cent from the previous target of 2025 to 2035, thereby allowing a operating lifetime extension of existing reactors beyond 40 years.

Lifetime extension also gained progress in the US as the process of granting a second operating license extension for 80 years has begun.

Given all of these factors, for the first time since March 2011 (following the accident at Japan's Fukushima Daiichi nuclear plant), the World Nuclear Association released nuclear capacity projections with a positive trend in its biennial Nuclear Fuel Report.

Figure 1: Uranium spot prices (US$/lb U_3O_8), 1985 to 2019
(US dollar per pound of uranium oxide, annual averages)



[Source: Ux Consulting/US CPI]

Figure 2: Uranium prices (US$/lb U_3O_8), 2006 to 2019
(US dollar per pound of uranium oxide)

Source: UX Consulting and Trade Tech

Marketing our product

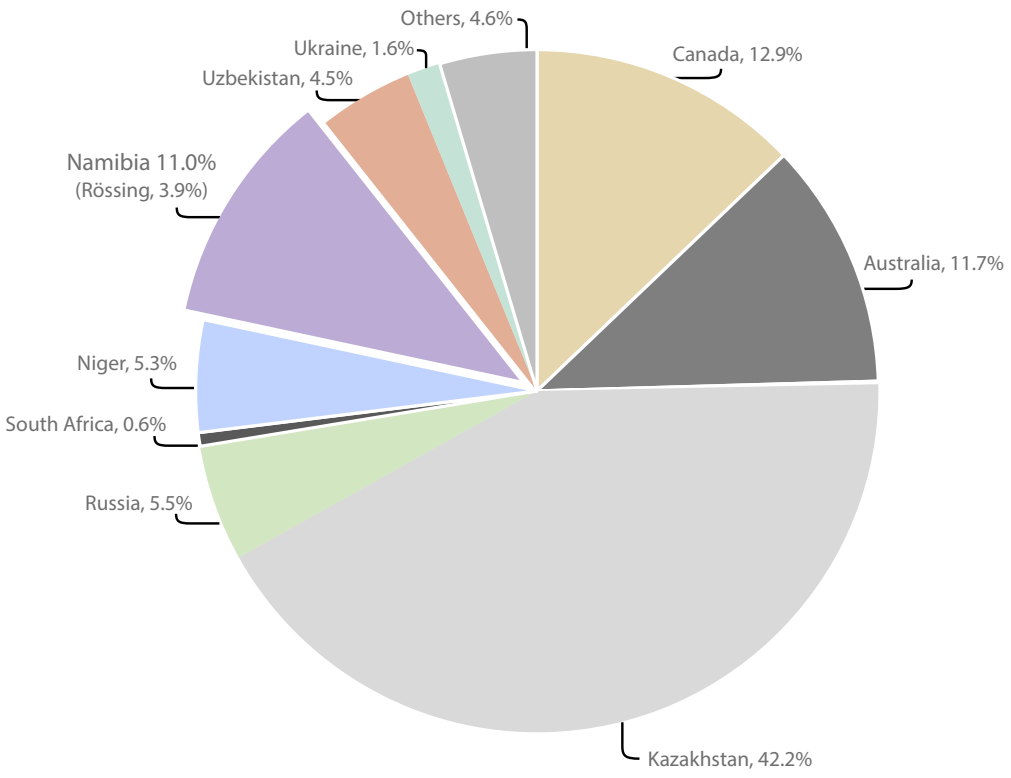
Over the years, Rössing Uranium's production has been marketed under various market environments. A significant proportion of production is committed through long-term contracts (signed when market prices were higher), which mitigate the impact of the low spot price in the current stagnant market.

In 2019, 75 per cent of Rössing's total production was delivered under long-term contracts and several historical spot contracts.

Following the successful acquisition of the majority stake by China National Uranium Corporation, the remaining 2019 production will be sold during 2020 to China to be loaded into CNNC nuclear reactors. This vertical integration into the CNNC group opens a significant marketing opportunity into China for Rössing Uranium.

By region, from our total 2019 sales revenue, 51 per cent was sold to customers in North America, 28 per cent to customers in Europe, Middle East and Africa (EMEA) and 21 per cent to customers in Asia.

Figure 3: World primary production of uranium oxide, 2019 (%)



Our operations

Our mining fleet uses a combination of electric power and diesel with most of the larger track equipment (drills and shovels) on power. The haul trucks also use a combination of diesel and electricity and are fitted with trolley assist (like an electric tram system) for the permanent ramps that saves fuel and allows them to drive faster uphill while carrying a load. A haul truck takes around 45 minutes to complete a full cycle in the pit from loading at the shovel to returning empty after tipping its 180-tonne load.

Rössing Uranium's operations consist of two distinct activities: the first is mining uranium-bearing rock, while the second is processing this ore into uranium oxide for the world's nuclear energy market, which fuels the generation of electricity. Our attention is directed towards creating shareholder value and maintaining a secure and viable business, as well as ensuring that we remain a long-term contributor to Namibia's economy.

The uranium located in our mining licence area is embedded in very hard and abrasive granitic rock, known as alaskite. To mine the necessary volume of ore and waste, the mine must conduct blasting operations regularly.

Electric and diesel-powered shovels load uranium-bearing rock onto haul trucks, which transport the ore to the primary crushers for the first stage in the crushing process.

From there the crushed ore is conveyed to the coarse ore stockpile, where it is reclaimed and put through additional crushing stages in the Fine Crushing Plant, before the processing stage of operations begins.

MINING OPERATIONS

In 2019, we mined 22.4 million tonnes of rock (13 per cent more than in 2018) of which 8.6 million tonnes was economic uranium-bearing ore (7 per cent more than in 2018), and 13.3 million tonnes were waste and low grade ore (0.5 million tonnes were also dumped in-pit). This equates to a waste-to-ore strip ratio of 1.60, which is slightly lower than 2018, and the waste-to-ore ratio will continue to decrease as the open pit gets deeper.

22.4m

22.4 million tonnes of rock were mined during 2019, compared with 19.8 million tonnes in 2018.

8.6m

8.6 million tonnes of rock were uranium-bearing ore, compared with 8.0 million tonnes in 2018.

13.3m

13.3 million tonnes of rock were waste rock removed from the open pit, compared with 11.5 million tonnes in 2018.

Despite the higher tonnes mined, the ore milled reduced from 8.9 million tonnes in 2018 to 8.0 million in 2019. The run-of-mine stockpiles ended the year at 1.1 million tonnes.

The uranium grade continued to increase while the calc index started to decrease (9 per cent higher and 7 per cent lower respectively compared with 2018). The better grade largely offset the shortfall in plant throughput relative to 2018.

The higher grade and lower calc index assisted plant controls which saw an increase in overall recovery and decrease in acid consumption.

Grade and calc index remain a key focus in 2020 with the added complication of a high proportion of amphibole schist material that affects processing in the plant. Work continues on controls to improve the consistency of ore blend to the plant. (The calc index is a measure of the acid-consuming gangue minerals in the feed, such as calcite and amphibole.)

Improvements were achieved in a number of other areas, with health and safety at the forefront of many improvement projects at the mine.

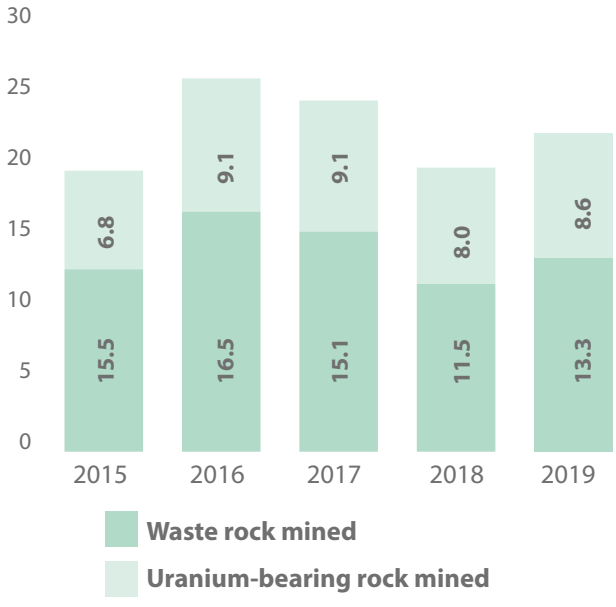
On the maintenance side, equipment availability of the drills and shovels improved, while the haul truck availability declined by 3 per cent relative to 2018. Despite this, the planned mined tonnes were achieved for 2019 and 2020 will continue with the same fleet despite slightly lower targets.

Focus areas in 2020

Vehicle collision and roll-over with heavy mine equipment (HME) remains the highest safety risk in the open pit. Fatigue management and speed controls will also remain key focus areas in 2020.

Productivity and cost improvement initiatives will continue in 2020, with a specific focus being on the effectiveness of haul truck utilisation, as well as explosives and diesel consumption.

Figure 4: Mining, 2015-2019 (million tonnes)



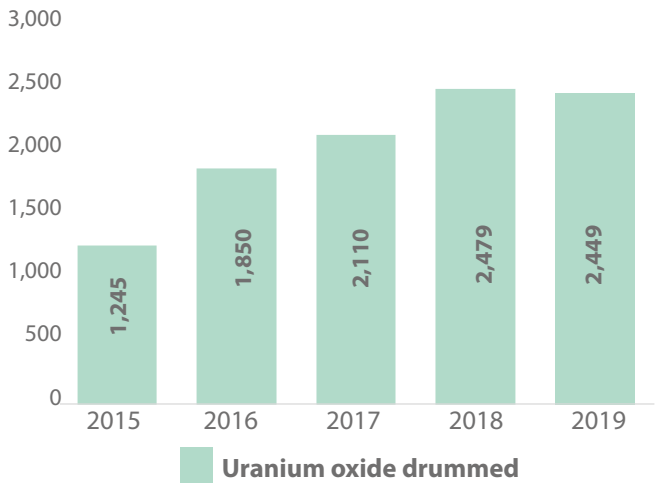
PROCESSING OPERATIONS

The Processing Plant is responsible for the extraction of uranium from mined ore through a number of stages to produce uranium oxide (U_3O_8). This product is securely packed and shipped to our customers for further conversion.

The aim of the plant is to produce targeted quantities of uranium oxide in the most efficient and safe manner possible.

We produced a total of 2,449 tonnes of uranium oxide in 2019 , which is marginally lower when compared with 2018's production of 2,479 tonnes.

Figure 5: Uranium oxide drummed, 2015-2019 (tonnes)



(From left) Sepo Lusepani (Chemist) and Julia Jason (Laboratory Technician) with test tubes from various stages in our production process analysed in the mine's chemical laboratory.

Rössing Uranium's young professional employees, Eliaser Silvanus, Hilde Kafidi and Milka Musuuo, at the main entrance to the mine site. The arch in the background was unveiled on 25 July 2019 at the handover of the mine from Rio Tinto to the new majority shareholder, China National Nuclear Corporation (CNNC).

ENGINEERING PROJECTS

Several engineering projects were undertaken during 2019.

Arch at main entrance gate

Shortly after the sale of Rössing's shareholding was concluded, the engineering team started with the design and manufacturing of the arch gate leading to the mine's main gate. This arch is testimony of the gateway to a new era, leading Rössing Uranium into a new future.

New solvent tanks in Solvent Extraction area

After a pressure vessel test was done, the existing kerosene storage facility located in Solvent Extraction (SX) was found to be defective. Due to the fact that the SX is a highly flammable and a high-risk area, it was recommended to replace (rather than repair) the old storage vessels. The storage facility was replaced with a 97 m^3 facility comprising of two kerosene vessels, with capacities of 67.12 m^3 and 30.28 m^3 respectively.

A fire detection and suppression system was installed to reduce the risk of fire and, in case of a fire, to contain it. Other improvements made include flow and pressure safety measures for offloading and transfer pumps. Safety mechanisms on the tank levels were also introduced to prevent overflow of the two new vessels. Offloading and transferring can be done to either tanks, or to both, by selecting the relevant valve configuration.

Pulp distributor replacement

During the annual shut-down in the reporting year, the pulp distributor at Leach Module 1 was replaced. In addition, the existing concrete slab was replaced with a fibre-reinforced plastic (FRP) platform while the old pulp distributor was taken out.

The aim of this engineering project was to provide a safe working platform for the operators and also to increase the efficiency of the pulp distributor.

The work included removing the first stage barren distributor and structure, the pulp distributor and all associated pipes. It further involved the replacement of the dilapidated concrete floor with a FRP platform. The new FRP floor is chemical resistant, can take high loads and has a fast assembling process. The platform's fast assembling process made it possible to complete the project in three weeks.

Leach line repairs

In 2019, Rössing Uranium embarked on a project to repair or replace the concrete trench line located at Leach Module 1. This trench line passes next to a calcine reactor steel support structure that is seated on concrete bases and stub columns. This area also has a concrete surface bed, which covers the area under the steel support frame and extends to the trench line interface.

The engineering team have noticed structural deterioration on the trench, concrete stub columns and surface bed due to its continued exposure to very acidic slurry spillages from the nearby leach tanks and run off from the rod mills. External consultants completed an investigation on the structural stability and it was decided to reinstate the structures (trench, column bases and surface bed) to be properly protected against the negative effects of future exposure to acidic and other environmental conditions, and perform a functional design period of minimum ten years.

Repairs on Primary Crushing structure

Critical structural repair work was embarked upon to the Primary Crushing structure, retaining walls and support members. Most notably to the hopper floors, where innovative engineering resulted in making use of old railway lines to prevent future damage to the hopper floors.

The crushers were shut-down twice to permit structural repairs to both hopper floors, which were successfully repaired in October.

Arandis roofing project

In 2018, the Arandis Town Council, in collaboration with Rössing Uranium and the Rössing Foundation, started a project to remove the asbestos roofing sheets from 416 houses and two primary and secondary schools in the town, replacing these with zinc-aluminium roofing sheets that are environmentally friendly.

This followed engagement with the residents through public meetings and awareness campaigns about the possible health risks of using asbestos roof sheets.

During 2019, a total of 239 houses' asbestos fibre cement roofs have successfully been removed and replaced, totalling 65,900 m^2. The project experienced delays during June to August due to excessive wind speeds, preventing the removal and replacement of the roof sheets.

Community co-operation with the process continues to be excellent. At the beginning of the year, it was planned that the roofs of 320 houses and the schools would be completed by December 2019. However, due to proper cost control, the project will be able to complete 436 houses at the end of April 2020 within the budget of N$28 million. This means that all critical and high-risk house roofs will be completed. All asbestos sheets removed are disposed of at the Walvis Bay hazardous waste site that was upgraded to accept all the material from the project.

Other engineering projects

The following were other engineering projects completed during 2019:

- To mitigate or eliminate exposure to fire risk, fire retardant coating was applied to all cables and trenches in all major substations, while the fire detection systems in all major substations were upgraded or extended, and integrated into the early warning alarm system at the Protection Services control room.
- Dust ingress mitigation: pressurisation units were installed at seven identified high potential dust contamination medium voltage substations and at the motor control centre feeding the reduction area.
- Medium voltage (MV) switchgear refurbishment: A new modular MV switchgear was installed and successfully commissioned at the Administration offices and Protection Services building to render redundancy capability of supply to these premises and upgrade obsolete switchgear, which served the reticulation system for more than 40 years. (Redundancy capacity refers to the inclusion of extra components which are not strictly necessary to function, but used in case of failure of main components.)
- Energy meter extension: The installed consumption metering system was extended with the installation of a further 13 energy meters to enable complete energy consumption monitoring and verification to all billing areas within the mine.

FRUITFUL COLLABORATION BETWEEN CNUC AND RÖSSING TEAMS

With the change in majority shareholding, collaboration between Rössing and CNUC opens up avenues of efficiencies in the sharing of new knowledge, skills and technology.

One such example is the trialling of 'down-the-hole' (DTH) logging technology in the open pit. DTH logging, as applied at Rössing, is a process whereby U_3O_8 grade is determined by collecting radiometric data down blast-holes with the use of wireline technology.

This removes the error associated with the current practice of collecting physical samples from the cone of drill chippings surrounding each hole.

DTH logging trials were first conducted at Rössing in 2017 using an external contractor and again in 2019 with support from CNUC. Both trials focused only on the determination of U_3O_8 grade using similar technology, but the CNUC trial was more automated, using vehicle mounted tools.

Results from both trials confirmed the ability of DTH logging to provide U_3O_8 grade information.

In addition to better grade information per hole, another clear advantage demonstrated during the CNUC trial was the ability to obtain 3D grade data with depth and across the drill pattern. This has the potential to improve resource estimation and mining selectivity.

Benefits demonstrated during the CNUC trial can be summarised as follows:

- Improved data quality and collection;
- Reduced HSE exposure (ergonomics, auger vibration, dust and heat exposure);
- Faster turn-around-time leading to better decision making;
- 3D information with the potential for better resource estimation; and
- Potential reduction in operating cost through less labour intensive process.

(Above) Faustina Shuuya (Senior Assistant Geological) using the 'down-the-hole' (DTH) logging technology at blast holes in the open pit to collect radiometric data down the holes with the use of wireline technology.

Milka Musuuo (HSE Training Advisor), Regina Nambahu (OHSE Representative) and Hilde Kafidi (Health and Wellness Advisor), conducting a critical risk assessment (CRM) at the Fine Crushing area in the Processing Plant. For Rössing Uranium, safety is the foundation on which we build our business and our surrounding community. We believe all incidents, injuries and occupational illnesses are preventable and, therefore, our goal is zero harm.

PROCESS SAFETY MANAGEMENT

Process safety management (PSM) is a systematic approach of controlling the unwanted release of hazardous substances, process solutions or fires and explosions that have the potential to significantly impact the health and safety of employees, the environment or the business.

In 2019, Rössing Uranium's PSM steering committee decided on four main process safety hazards. These four process safety hazards are managed with strict engineering and administrative control strategies. The four hazards identified were:

- anhydrous ammonia gas,
- concentrated sulphuric acid,
- fire in the solvent extraction and final product recovery plant, and
- engulfment due to large processing tank failures.

Formal internal and external audits were conducted in April 2019 to assess how efficient the mine is at controlling process safety hazards. The audit findings justified a 'deep-dive' hazard and operability study on anhydrous ammonia storage and distribution systems. These systems have been upgraded to prevent any loss of containment and also improve detection of any leaks.

The PSM team received formal training to enable them to train operational leaders on mindfulness of process safety and how to manage it by using control strategies. The main objective of this training was to obtain a deeper understanding of process safety management and sensitise operational leaders to the realities of process safety incidents. All operational leaders at Rössing Uranium received training in May 2019.

In the latter part of 2019, it was identified that the engineering standards and manuals currently being used are outdated. The PSM team was tasked to identify the shortcomings and embark upon updating of these standards and manuals as an improvement project in 2020, together with the normal day-to-day control strategies of the mine's four main process safety hazards.

In the beginning of 2020, the next PSM system audits will be done, in addition to a 'deep-dive' hazard and operability study to be conducted on the sulphuric acid storage and distribution systems.

The PSM team will persist in their supportive responsibility towards operations, maintenance, engineering and HSE.

INFORMATION TECHNOLOGY

A highlight was being nominated for the SAP Africa Quality Awards. (SAP stands for Systems Applications and Products and is a business application software program.) At the gala event held in Johanneburg in August, recognising some of Africa's most innovative public and private sector SAP customers, Rössing Uranium was awarded a bronze award in the Business Transformation category.

The implementation of the stand-alone SAP enterprise resource planning (ERP) software system was completed in April 2019, to enable Rössing Uranium to function independently.

Significant upgrades have been made to improve the wireless networks around conference rooms and offices for both employees and guests visiting the mine. Additional fibre network was installed in the open pit to reduce the current highly congested wireless networks.

More surveillance cameras were added around the administration buildings and parking areas on the mine to improve security. In addition, 58 cameras were fixed in 2019 as part of the surveillance cameras remedy project.

Looking forward, a key project which will be implemented in 2020, is the SAP Time and Attendance Project or Workforce Management solution on the SAP system. The key benefits of this system will be labour-cost reduction through controlling overtime and effective time, absenteeism management, productivity and services improvement and the mitigating of compliance risks.

All documents from the HR and HSE departments have been migrated to a document management system called SharePoint. All other remaining departments will also be migrated to the same system over time. Key business requests forms are also converted to electronic format, with an electronic approval workflow process. This will significantly reduce paper forms and the need for people to run around to get paper-based approvals.

The surveillance cameras remedy project will continue in 2020. An investigation will be done early in the year to ensure all 205 cameras are fully operational.

(From left to right) Graciana Emilias (Laboratory Technician), Tobias Shayula (Sampler), Julia Jason (Laboratory Technician), Geoffrey Ganeb (Laboratory Technician) and Tjikukutu Muniazo (Sampler) working at the chemical laboratory at the mine.

Our people

Our people are the most important asset of our business. In order to sustain and expand our operations, we need a safe, healthy and engaged workforce.

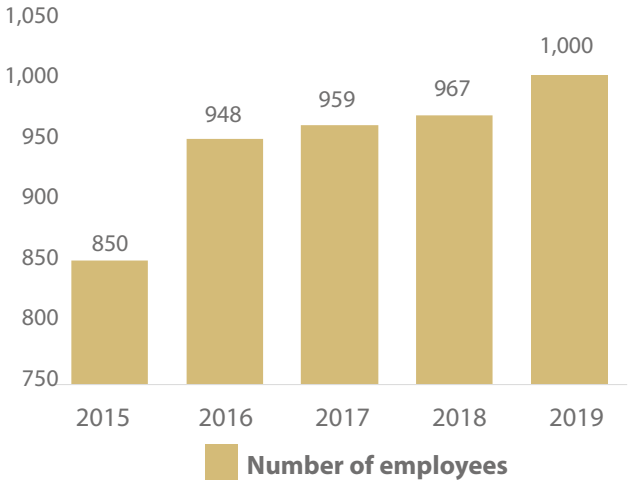
(From left to right) Sepo Lusepani (Chemist) and Webster Simulya (Laboratory Technician) are also working at the chemical laboratory.

Aspiring to be an employer of choice, Rössing Uranium provides long-term and rewarding employment by investing in our people throughout their careers. We believe that through employment creation we are making significant contributions to society and the economy, and contribute positively to our partnerships with local communities and other stakeholders.

We recognise the importance of attracting, developing and retaining people with diverse backgrounds in our business and realise the benefits of developing the skills of others. It is the mandate of the Training and Development section to see that this commitment is demonstrated and aligned to Rössing's needs and objectives.

We understand that our operational environment may be hazardous, and for this reason, the identification and management of material risks are crucial in our business approach. We consistently strive to create a zero harm working environment, regardless where our people work or what type of work they are engaged in.

Figure 6: Employees, 2015-2019 (number)



Workforce at a glance

At the end of 2019, Rössing Uranium had a workforce totalling 1,000 compared with 967 at the end of the previous reporting year. The average number of contractors at the mine increased from 938 to 1,029.

Employee relations

Employee relations continued to be an important focus area for our business during 2019 as Rössing strives to maintain harmonious relations with its workforce. In the transition to new majority ownership, the mine experienced no major industrial action in 2019.

A peaceful demonstration was held, in which demands were made to have a disciplinary hearing of a group of employees dismissed. A Labour Court matter between the Mineworkers Union of Namibia (MUN) and Rössing on the interpretation of the Sunday-pay agreement, entered into in 2003, remains unresolved.

The MUN and Rössing were unable to agree on annual wage increases before the end of the calendar year, and the matter has been referred for conciliation.

TRAINING AND DEVELOPMENT

Rössing Uranium remains committed to the training and development of our people, which is a critical process aimed at enhancing productivity and organisational performance, benefitting both the employee and the company. The Training and Development section supports the mine's strategy to achieve its objectives by providing support and services to the various departments through collaboration and partnerships.

Our vision is to develop our people for growth, allowing our employees to recognise the Rössing Uranium values in terms of learning. The next few pages highlight the initiatives that will support us in achieving our goal of empowering and developing the workforce.

Workforce profile	2015 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)
Historically disadvantaged Namibian men	77.1	78.2	77.0	78.0	77.6
Historically disadvantaged Namibian women	15.7	15.5	16.3	16.1	16.6
Previously advantaged Namibian women	1.7	1.5	1.4	1.2	1.2
Previously advantaged Namibian men	3.7	3.0	3.6	3.0	3.3
Non-Namibian men	1.5	1.5	1.4	1.4	1.2
Non-Namibian women	0.1	0.1	0.1	0.2	0.1
Persons with disabilities: men	0.2	0.2	0.2	0.1	0.0
Persons with disabilities: women	0.0	0.0	0.0	0.0	0.0

Statistical information on our workforce, 2019

Local and foreign employees:

- Namibians: 98.7 per cent (987)
- Non-Namibians: 1.3 per cent (13)
- Female representation: 17.8 per cent (178)
- Number of employees who left the mine's employment: 44
- Number of new employees recruited: 77

Rössing Uranium recognising employees for their long-service achievements in 2019. At this event we celebrated long-service achievement of 40 years for five recipients (photograph on the left) – in total, they had 200 years of working experience between them. We also celebrated the 30- and 35-year mark for others. In total, between all the long-service candidates in 2019 (photograph on the right) they had 385 years of working experience at the mine — an impressive achievement.

Recognising our employees

Rössing Uranium is committed to recognising our employees as a means of improving employee morale which drives performance excellence and engagement. The Making-a-Difference (MAD) programme has grown since its inception in 2012.

With our defined values of safety, teamwork, respect, integrity and excellence, we recognise and reward our people's efforts in their quest for excellence.

During 2019, 136 employees received recognition awards for their effort and for going the extra mile.

Educational Support

Developing young Namibians is part of our social corporate responsibility as it contributes to the growth of the country at large and ensures the uplifting of skills. A total of 34 permanent employees were assisted with correspondence studies for undergraduate and post graduate studies.

People supported by Rössing Uranium — 2015 to 2019: Number of participants in training and development programmes

Nature of participation	December 2015	December 2016	December 2017	December 2018	December 2019
Trade bursaries	10	0	0	0	0
Trade job attachments	10	10	30	30	30
Apprentice employees	1	0	0	0	0
College/university bursaries	10	11	10	8	8
College/university job attachments outside company bursary scheme	0	3	2	0	0
Employees enrolled at a technical college (full-time studies)	1	1	0	0	1
Employees enrolled at a college/university (full-time studies)	3	2	3	2	0
Employees involved in correspondence programmes	12	8	19	34	34
Employees enrolled in the leadership development programme (in-house)	0	64	0	58	25
Rössing Uranium dependant scholarships awarded	25	26	34	28	26
Employees in limited-contact studies in various fields	3	5	3	1	2
Total number of participants	**75**	**130**	**101**	**161**	126
Training programme costs — this figure includes all other training initiatives carried out as part of capability development	**N$5.4 million**	**N$7.6 million**	**N$8.5 million**	**N$6.9 million**	**N$5.8 million**

A Rössing team visited the Ranger Uranium Mine (ERA) in Australia to observe their operations, gather information of their Venturi Scrubbing System, get information on their maintenance tactics, as well as their environmental monitoring and control performance.

Two Rössing Uranium employees, Anca Burger (left) and Edwin Tjiriange (second from right) were invited by the International Atomic Energy Agency (IAEA), together with uranium experts from other member states, to contribute to the development of a technical publication that relates to management of ageing uranium mining and processing facilities.

A total of 30 trade apprentices completed their job attachment as part of their tertiary curriculum whereby they were exposed to on-the-job learning within their various disciplines. Further opportunities to support trade apprentices will continue during 2020.

Graduate Development programme

Eight graduates supported by Rössing are currently on a 24-month training programme with the aim to develop their technical competencies and leadership skills. It also supported the transition from university to the workplace.

During their programme they are given business-driven-action-learning group projects to enable them to gain real work-life experience and to challenge their technical competencies.

The impact of these projects contributed significantly towards the mine's improved operational efficiency, health, safety, security, environment and skills development.

Vocational Education and Training Levy

Rössing Uranium has participated in the Namibia Training Authority's Vocational Education and Training (VET) Levy submission since its inception. As a result, the mine contributed N$7.7 million during the 2019 training-levy cycle.

An annual inter-mines sports tournament in Otjiwarongo, with a Rössing team participating in various sport codes, demonstrates the good spirit experienced by employees from different mines in the country.

The Rössing Foundation's Chief Education and Enterprise Officer, Lysias Uusiku, and his son pictured with Liu Yang, China's first female astronaut in space. Liu Yang and her colleague Chen Dong were invited by President Hage Geingob for a five-day visit to Namibia. Three schools supported by the Rössing Foundation had the opportunity to meet the two astronauts in Swakopmund during the school holiday. They also paid a visit to the Chinese Telemetry Tracking and Command Station Centre outside Swakopmund.

OCCUPATIONAL HEALTH MANAGEMENT

We firmly believe that occupational disease and illness can be prevented, provided that risks are properly eliminated, managed and controlled. Our occupational health, hygiene and wellness programmes are aimed at preventing ill health, but also promoting good health and well-being.

WE IDENTIFY AND QUANTIFY HEALTH HAZARDS TO ENABLE US TO MINIMISE EXPOSURE AND PREVENT INJURY AND ILLNESS THAT MAY OTHERWISE DEVELOP.

In adherence to legislative requirements as well as the risk-based occupational health standards of Rössing Uranium, some of our key programmes include, but are not limited to:

- noise exposure control;
- workplace ergonomics management;
- health and medical monitoring;
- hazardous substances exposure control; and
- fitness for work and fatigue management.

OCCUPATIONAL HYGIENE

Our workplace health exposure monitoring programmes are designed to quantify potential emissions and exposures with the aim to control harmful health risks and agents.

At Rössing Uranium, our risk-based monitoring programmes are reviewed annually. Our monitoring strategy is determined from the site-risk register review process and it focuses on groups of workers who have the same general exposure profile due of the similarity and frequency of the tasks they perform, the similar ways in which they perform those tasks and the similar materials and processes they use in their work.

These groups are described as similar exposure groups (SEGs), which includes all Rössing Uranium workers and site contractors. During 2019, we monitored 16 of the 20 SEGs. Although there are 20 SEGs, not all the SEGs are monitored every year, as the monitoring focuses on a risk-based approach. SEGs to be monitored are determined every year according to statistical analysis of the previous three years' data.

Monitoring data is used to better evaluate the risk to people in our workplace and to assist in determining the effectiveness of risk mitigating controls, compliance with legal requirements, our requirements of the Rössing Uranium management system and health performance standards and progress against our objectives and targets.

To ensure that collected data is accurate, comparable and representative, statistical analysis and validation is conducted. Internal criteria are established to protect the health of all our workplace personnel, including contractors, and they are defined as occupational exposure limits (OEL). Non–conforming monitoring results are investigated through the incident management process and appropriate actions are developed and implemented to rectify the non-conformance.

Some of the harmful health risks and agents at our workplace include exposure to noise, dust (silica) musculoskeletal stressors and microbiological agents found in the water system.

During 2019, our occupational hygiene monitoring programme included measurements of noise levels, respirable dust (including crystalline silica quartz), welding fumes, manganese dust, volatile organic compounds (VOCs), compressed air quality (aero testing) and water-borne bacterium (Legionella and potable water).

Dust

Our mining activities, such as the blasting, drilling, loading and hauling of ore on unpaved roads are typically the major sources of dust emissions. Transfer and pulverising of ore, which is mostly dry, at the primary crushing circuit and Fine Crushing Plant contribute to high levels of fine dust concentrations, which are experienced at the Processing Plant and surrounding work areas.

During the reporting year, our dust monitoring was focused mostly on crystalline silica quartz. Silica is a natural substance found in our ore; when the ore is processed, dust is created.

Figure 7: Average personal respirable silica dust exposures, 2019 (UCL1, 95% - Land's "Exact")

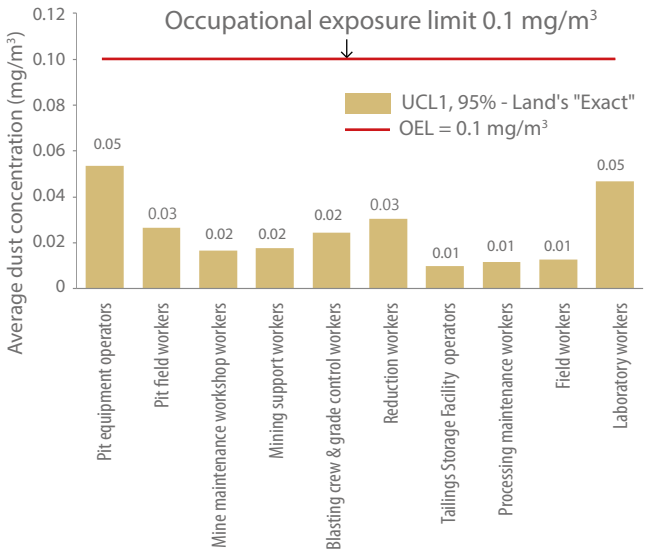


Figure 8: Average personal noise exposures, 2019 (Estimated Arithmetic Mean - MVUE)

Some of this dust is fine enough to reach deep inside the lungs; this is known as respirable crystalline silica (RCS) and can cause harm to a person's health.

During 2019, we collected 131 RCS samples from ten SEGs and the OEL of 0.1 mg/m³ for RCS has been applied. None of the SEGs monitored exceeded the OEL for silica (see Figure 7), whilst Pit equipment operators and Laboratory workers were exposed to RCS at 50 per cent of the OEL based on the Land's "Exact" 95 per cent Upper Confidence Limit (UCL), analysed utilising the Occupational Hygiene Statistic tool IHStats.

The main focus in 2020 will be to utilise real time technology and onsite silica analysis by means of a portable FTIR, to optimise and intensify the monitoring programmes for RCS.

Noise

The aim of our hearing-conservation programme is to protect our workers' hearing, mainly because over-exposure to sound above the stipulated OEL of 85 dB (A) can result in noise-induced hearing loss, which is irreversible. This can be aggravated by simultaneous exposure to some chemical substances, for example carbon monoxide and solvents. Noise may also have an adverse effect on other systems, including the body's cardiovascular system.

Heavy mining equipment, combined with high volume settings on two-way and FM stereo radios in the equipment cabs, as well as general plant and equipment noise are the main sources of over exposure to noise at Rössing Uranium. Noise zoning is applied in high risk areas, together with the application of customised hearing protection devices (CHPD). In other areas, disposable ear plugs are used.

During 2019, eight of the 14 SEGs that were monitored exceeded the occupational exposure limit of 85 dB(A). Figure 8 depicts the average annual personal noise exposures measured for the different similar exposure groups in 2019. All employees who work in dust or noise high-risk areas are issued with customised respiratory- or hearing-protection devices. These devices are maintained and fit-tested on an annual basis. ***Measured exposures indicated in Figure 8 do not take into account the protection factor provided by these devices.***

OCCUPATIONAL MEDICAL SURVEILLANCE

Occupational medical surveillance examinations provide baseline and periodic measurements to detect abnormalities in workers exposed to work-related health hazards early enough to prevent or limit disease progression through exposure modification or medical intervention.

At Rössing Uranium, a risk-based periodic medical programme is followed with consideration of the exposures of employees and contractor employees in different similar exposure groups (SEGs). These require employees and contractors to undergo pre-employment, periodical and exit medical examinations.

Other medical examinations during employment include transfer medical examinations and return-to-work fitness medical examinations. Through the mine's workplace wellness programmes, employees are encouraged to undergo additional medical screening tests to manage their own health and as a means of detecting chronic and/or life threatening illness.

WELLNESS

Our workplace wellness programmes are designed to help us in creating a work environment that is healthy for our employees. Encouraging employees to look after their health and well-being is a critical component of our overall approach to health and safety. The programmes also involve increasing knowledge and awareness through campaigns and education sessions and introducing policies that help employees make healthier choices.

Various activities were undertaken during 2019 to support these programmes.

Wellness Week

In collaboration with Namibia Health Plan (NHP), Rössing Uranium's annual Wellness Week was held onsite from 19 to 22 November 2019 for the sixth consecutive year. A total of 609 employees and contractors received wellness screening during this week.

During the programme kick-off event in November, the new Wellness Programme logo was also launched.

Alcohol and drug awareness

Alcohol and drug abuse awareness sessions were held onsite with contractor companies to raise awareness of the dangers of alcohol and drug abuse. A total of 609 contractors attended these sessions. Subsequently, an alcohol and drug support group was established in Arandis for Rössing employees, contractors and their relatives. This group meets bi-weekly.

Blood donation clinics

The Blood Transfusion Service of Namibia held three blood donation clinics onsite, during which a total of 165 units of blood were donated. These units can potentially save at least 495 lives.

Employees knowing their HIV status

HIV Voluntary Counselling and Testing (VCT) event was held onsite in December 2019 at no cost to employees and contractors. A total of 77 persons attended.

Shoe Box Project

Rössing Peer Educators donated 49 shoe boxes containing Christmas gifts to the children at Ûiba Ôas Crystal Market near Usakos in December 2019.

Health study

An epidemiological study, commissioned by Rio Tinto, on the potential effects of low level occupational radiation exposures on mine workers started in 2015 in cooperation with the Centre for Occupational and Environmental Health at the University of Manchester in the United Kingdom. An external advisory committee, consisting of community leaders and Government representatives, is assigned to provide external input and advice.

As part of Rössing's corporate social investment programmes, Rössing's Peer Educators donated 49 shoe boxes from employees, containing Christmas gifts to the children at Ûiba Ôas Crystal Market in December 2019. The Ûiba Ôas Crystal Market is situated on the main road between Usakos and Arandis and managed by the Ûiba Ôas Cooperative.

The study was expected to be finalised during the first half of 2019; however the University of Manchester communicated a delay in the completion of the study due to a number of factors, including additional time taken in data gathering and work required to analyse the complicated data sets. Rössing Uranium remained committed to making the findings public, and after the process of obtaining the relevant regulatory reviews from the Government of Namibia, plan to brief employees and communities in 2020. For more information, visit the Rössing website, Reports and Research section.

Focus areas in 2020

Hearing protection devices (ear plugs, ear muffs and customised hearing protection devices) are our critical control for noise exposure; therefore, focus will be placed on ensuring consistent and correct usage of these devices. Supporting these actions, we will implement a hearing-protection, fit testing validation programme for disposable ear plugs.

Our respirator and dust mask fit testing will be improved by moving from a qualitative testing method to a quantitative testing method following the purchase of quantitative fit testing equipment.

Monitoring of dust exposure, utilising new improved real-time monitoring equipment, and supporting the implementation of the dust management plan, remains another focus area.

Excellence in health, safety, security, environment and communities management is one of the foundations of Rössing Uranium's vision to be the safest and most efficient, long-life uranium producer in the world. Rössing's Protection Services team plays an active role in the protection of the health and safety of our employees, contractors, stakeholders and neighbouring communities.

SAFE OPERATIONS

Being in a safe workplace is a fundamental right of employment. For Rössing Uranium, safety is the foundation on which we build our business and our surrounding community. We believe all incidents, injuries and occupational illnesses are preventable and, thus, our goal is zero harm. Our safety aims and objectives intend to encourage our employees to behave in ways which project a positive and proactive attitude towards safety.

Safety initiatives

During 2019, the following ongoing initiatives took place to further our goal of zero harm:

- Front line leaders' safety coaching programme: in-field coaching was rolled out to all front line managers to enable them to safely lead their teams.
- All employees and contractors received the required safety training.
- 'Energised work' is all types of work that must be performed without isolating the energy source. In 2018, we have identified several energised work instances in the Mine Maintenance area and improvements were made to eliminate or mitigate the energised work. In 2019, we continued with the second phase, applying the same procedures to the five critical tasks at the Processing Maintenance area.
- A 'deep-dive' (an in-depth examination or analysis of a topic) was done on energy isolation mine-wide in 2018, and improvements identified were implemented during 2019 as part of preventative management. The aim of energy isolation is to ensure that all sources of energy that could harm a person are isolated beforehand, to ensure a 'zero energy state' is reached.
- HSE training was provided to employees, which focused on developing and enhancing their HSE knowledge and skills.

- The 'Tiny Habits' campaign was rolled out. The aim of this campaign is to remind all employees of the seemingly small actions that we all are prone to at some point, that compromise safety at the mine. By implementing the 'tiny habits', we are changing our behaviour towards safety. These habits include the following:
  - No 'walking and talking' or 'walking and texting'.
  - Three-point contact at all times when ascending or descending stairs.
  - Always use pedestrian crossings to cross a road.
  - Always wear your seatbelt.
  - The job is not done, unless the housekeeping is done.
- To promote the reporting of near-miss incidents, a campaign was rolled out to rename near-misses and the winning name was 'ambala'. *Ambala* is a word used in many indigenous languages in Namibia which means something 'almost happened'. To enable everyone on the mine site to report with ease, *ambala* reporting cards were placed all over the mine, to be easy in reach of everyone.

Highlights in safety management

Highlights in our safety management during 2019 included the following:

- Recognising Rössing's safety efforts and achievement, we won the Chamber of Mines' 2019 Best Safety Award in the Operating Mines category.
- The housekeeping competition audits continued and for the first time in the history of Rössing Uranium, two contractor companies won the competition in the second quarter of 2019. This is a milestone, as it is evident that our safety awareness campaigns and messages are not only applicable to the mine's employees, but to our contractors as well. The purpose of the housekeeping competition is to improve general housekeeping at the mine, as well as to instil a sense of pride in individual workshops. This competition is driven by occupational health, safety and environment (OHSE) representative and will continue in 2020.
- The Chamber of Mines' Safety Committee Peer Review and Meeting was hosted by the mine in early December 2019. The peer review is aimed at sharing successes and lessons learnt to improve safety. This visit was fruitful and Rössing could display how we eliminated energised work and introduced improvements with isolation in the workplace.

Achieving zero harm requires absolute adherence to policies, standards and procedures that intend to protect employees from injury and illness, and minimise significant negative impact on their lives.

Rössing Uranium won the Chamber of Mines' Best Safety Award in the Operating Mines Category. Jacklyn Mwenze, Rössing Uranium's Manager HSE and Protection Services received the prize from the Minister of Mines and Energy, Hon. Tom Alweendo, in April 2019.

CNNC
Rössing Uranium
Working for Namibia

HSSEC Policy

Health, Safety, Environment and Communities

Excellence in Health, Safety, Security, Environment and Communities (HSSEC) management is one of the foundations of Rössing Uranium's vision to be the safest and most efficient, long-life uranium producer in the world. This is in line with our commitment to Zero Harm, corporate citizenship, social responsibility and sustainability.

- The protection of the health and safety of our employees, contractors, stakeholders and neighbouring communities.
- Operating our business with respect and care for both the local and global environment in order to prevent and mitigate residual pollution.
- Understand and manage the effects of our product through its entire life cycle.
- Work with integrity and be in full compliance with applicable legislation and industry best practice.
- Seek continual and sustained improvement in HSSEC performance to create a Zero Harm work environment.








- Identify and assess hazards arising from our activities and manage associated risks to the lowest practical level.
- Enhance biodiversity protection by assessing and considering ecological values and land-use aspects in investment, operational and closure activities.
- Continue in our efforts to raise the awareness of HSSEC issues in our neighbouring communities.
- Regularly review our performance and publicly report our progress.
- Communicate our commitment to this HSSEC policy to all interested and affected parties.

In implementing this policy we will engage in constructive dialogue with our employees, contractors, neighbouring communities and all other stakeholders in sharing relevant information and responsibilities for meeting our requirements.

Johan Coetzee
Managing director
6 February 2020

Measuring safety performance

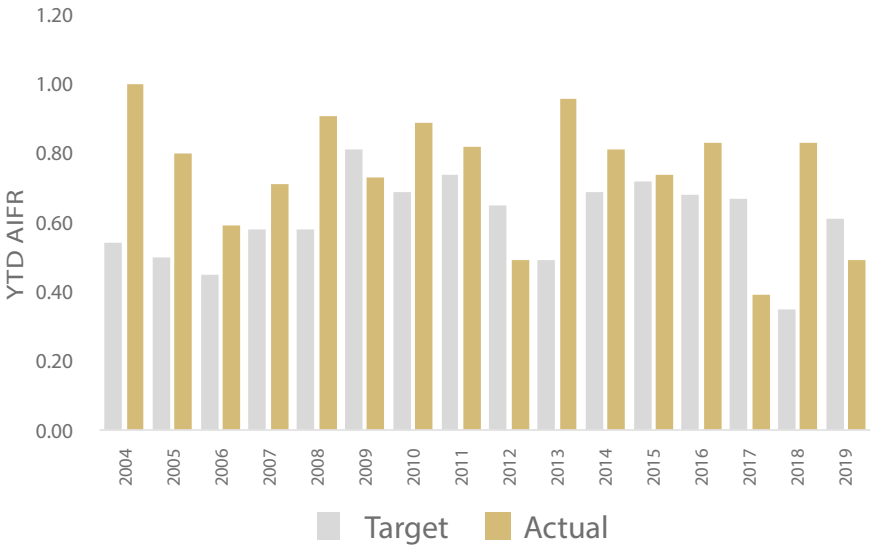
HSE management system mechanisms such as audits, risk assessments and HSE training also contributed to increasing safety throughout the reporting year. Rössing uses a range of measures to gauge its safety performance. Among these is the All-injury Frequency Rate (AIFR) derived from the total number of all injuries (i.e. medical treatment cases, lost-day injuries and restricted work-day injuries) per 200,000 employee hours worked.

The mine recorded an AIFR of 0.49, a significant decrease on the 0.83 AIFR recorded in 2018. It is also the same AIFR recorded in 2012, and the third best since 2004. Our AIFR target for 2019 was set at 0.61, which means we better our targeted AIFR with 0.12, a noteworthy improvement in our safety performance.

The following injuries and significant potential incident categories occurred on the mine during the review period:

- Lost-day injuries: 2
- Incidents requiring medical treatment: 7
- Restricted work-day injuries: 0
- Incidents requiring first aid treatment: 19
- Potential fatal incidents: 2
- Near-miss incidents: 118

Figure 9: Safety performance — AIFR, 2004-2019



Our safety message – being personally responsible for one's safety and that of others, and thereby contributing towards achieving a healthy and safe working environment for all employees and contractors and the community at large – remains the bedrock of our HSE activities. Thus, we put in place various additional safety measurements to improve our safety record in 2020.

HSE Management Systems

During 2019, there were a few major HSE systems updates. The change in ownership from Rio Tinto to CNNC meant that Rössing had to establish its own in-house HSE Management System and Assurance programme.

Critical Risk Management (CRM) was introduced to Rössing in 2015. After deliberation, we decided to continue with this fatality prevention tool. We set targets for CRM, which included participation and coaching targets for all operational employees and leaders. During 2019, a total of 32,600 verifications were done to ensure critical controls are in place before commencing any task that had a fatality risk.

Rössing was recertified to the ISO 14001 Environmental Management standard in 2019. The HSE assurance programme consists of a monthly internal assurance scorecard, which tracks all high level health, safety, environment, security and major hazard risks. In addition, due diligence inspections are carried out on a monthly basis throughout all departments. External audits are carried out by the external consultant, Bureau Veritas, as well as customers.

The two systems changes mentioned in the Information Technology section which was introduced in 2019, namely SharePoint as a document management system and an upgrade to a newer version of SAP, assist in managing HSE incidents and crew projects.

RADIATION SAFETY

The disadvantage of our low ore grades is that large amounts of ore must be mined for profitability. On the other hand, the significant advantage is that lower ore grades lead to lower levels of external radiation, and therefore lower occupational exposure to radiation in most areas of the mine.

Higher levels of exposure at Rössing can occur in areas where uranium is concentrated into its final form. These areas, which require additional radiation control measures, are called *controlled areas*. Access to such areas is restricted, and employees working there are continuously monitored for their exposure to radiation.

Workers from all areas are grouped into 20 Similar Exposure Groups (SEGs). SEGs are groups of workers having the same general exposure profile because of the similarity and frequency of the tasks they perform, the materials being used, processes being run, and controls in place.

In 2019, we started to apply a risk-based monitoring approach: areas with a historically higher exposure were monitored more frequently than areas with lower exposure. In addition, some of the SEGs, which showed similar and low exposures over the past years, are assigned with the same dose rates.

This so-called graded approach helps to focus on the key areas of the assessment where the highest contribution to doses and risk are to be expected. As a result, there were only 19 SEGs in summary.

Personal monitoring

The average dose measured for the 19 different SEGs is summarised in Figure 10. The total height of the bar chart is the value below which 95 per cent of the observations may be found (95 percentile). The average dose rate is 1.4 mSv per year, which is slightly higher than the 1.2 mSv per year measured in 2018. One possible explanation of the slightly increased dose can be an about 10 per cent higher ore grade in 2019 than in 2018.

AN AVERAGE OF 1.4 mSv/a IS VERY LOW COMPARED TO THE LEGAL ANNUAL DOSE LIMIT OF 20 mSv/a.

Surface contamination is regularly monitored in the Final Product Recovery area. The target set for the average surface contamination is 1.00 Bq/cm^2, which was reached in 2019. This is a considerable improvement to 2018 when we observed a surface contamination of 1.8 Bq/cm^2.

In addition to the direct monitoring of staff exposure to radiation, the possibility of contamination with uranium by ingestion is regularly analysed for traces of uranium. In 2019, more than 1,300 samples were sent to a pathology laboratory in South Africa for analysis. In June, we received results of a uranium-in-urine-concentration case which exceeded Rössing's internally set limit of 40 µg/L. The worker was immediately taken for medical examinations and after being found fit for work, transferred to a different work area. An incident investigation identified the cause of the increased uranium concentration and the respective operation was improved.

Jarosite

Jarosite is a basic hydrous sulphate of potassium and iron which forms at the mine, especially in its Continuous Ion Exchange (CIX) area, in particular in the tanks containing clear uranium-bearing solution ('pregnant solution') and contactors. The jarosite deposits on the wall of contactors, tanks and other surfaces and eventually will be an obstacle to the fluid flow.

In addition, the jarosite at Rössing is emitting gamma radiation, thereby exposing workers in these areas. Due to our daily dose limit of 80µSv, the presence of jarosite may restrict the tolerable work hours to less than the regular eight hours.

In 2019, we started a comprehensive study on the chemical composition of the jarosite with a spatial composition resolution below one micrometre. Persons working close to the jarosite were monitored and the data analysed to reveal the exposure development over the year. In 2020, it is planned to further study the formation process of jarosite with the goal to suppress jarosite formation.

Training

Radiation awareness training at Rössing Uranium continued in 2019. Besides the established Radiation Safety Induction and Refresher Courses, we developed special training modules for persons working at the Final Product Recovery and the Recovery areas.

A total of 569 employees and contractors were trained in various courses during 2019.

We continued to support the Namibian Uranium Institute (NUI) in Swakopmund. The Radiation Safety Officer (RSO) courses RSO II and RSO III were co-facilitated by Rössing's Specialist Radiation Safety. In 2019, two Rössing employees passed the RSO I, II, and III courses.

Rössing is also represented in NUI's Radiation Safety working group, where current topics related to radiation safety are discussed regularly.

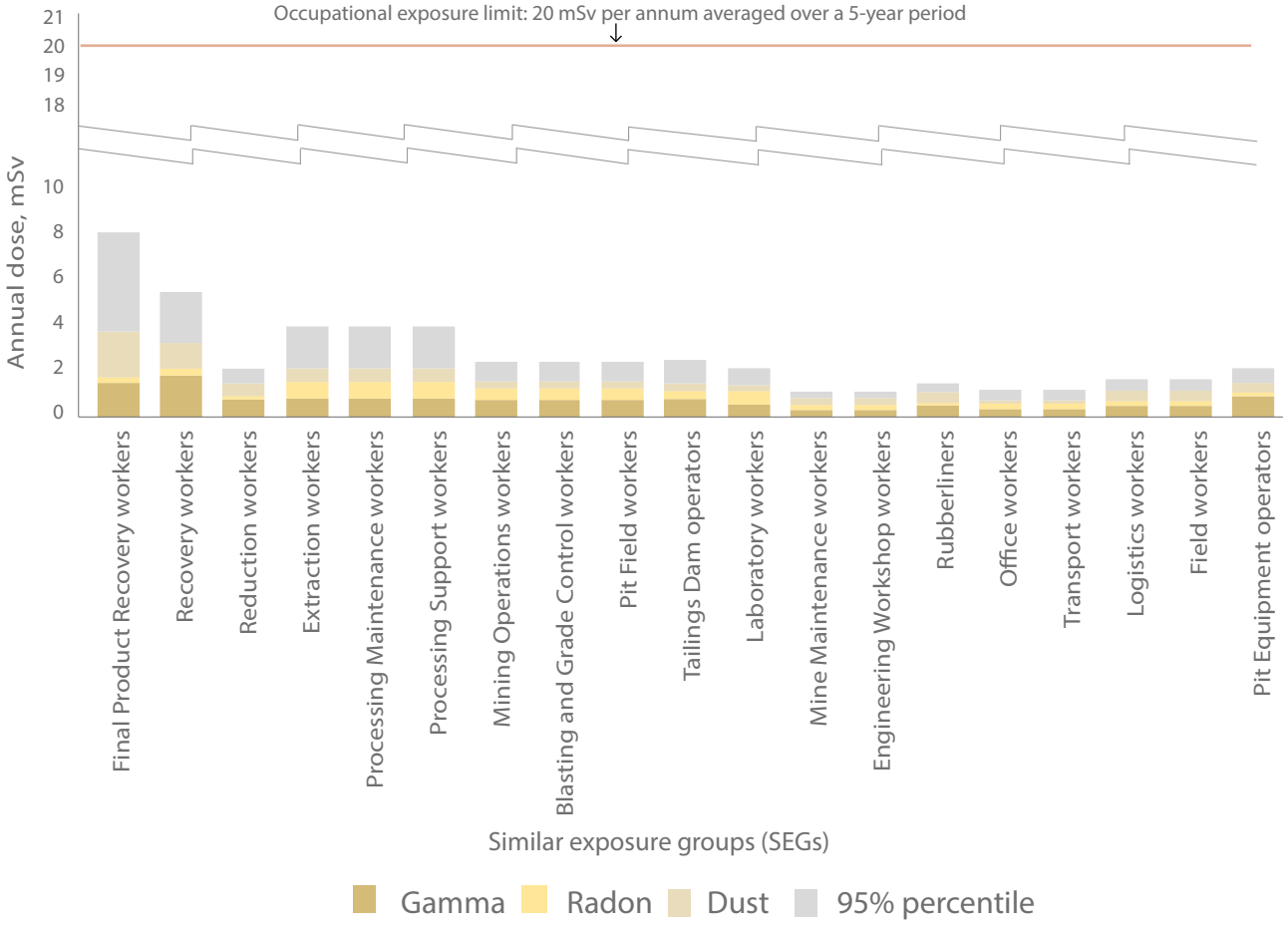


Figure 10: Personal radiation exposure dose by similar exposure group (SEG), 2019
Regulatory annual dose limit: 20 mSv

Community relationships

We acknowledge that operating within a sustainable community provides our business distinct benefits, such as skilled and locally available employees, capable local suppliers of goods and services, access to sustainably managed natural resources and healthy and safe environments for our employees and their families.

An important part of that is good community relations, which is as necessary for our business success as the effective management of our operations. With this in mind, we implement long-term community development plans that focus on improvements in quality of life. In 2019, we continued successful efforts to maintain these mutually-beneficial relationships.

COMMUNITY RELATIONS

Despite facing production and market challenges during 2019, Rössing Uranium remains committed to long-term stakeholder relationships that are mutually beneficial and executed in a respectful manner for both the beneficiaries and the mine. Honouring our corporate social responsibilities, we accomplished this through continued investment under the United Nations Sustainable Development Goals (SDGs). Our activities are also aligned with the Chamber of Mines of Namibia's Mining Charter, Namibia's Fifth National Development Plan (NDP5) and the Harambee Prosperity Plan.

In 2019, Rössing Uranium supported the Rössing Foundation and other community initiatives with just over N$26 million, of which N$12 million went to the Rössing Foundation, N$13 million to the Arandis asbestos-roof replacement project and N$1 million was in-kind and cash contributions to worthy community initiatives. This is over and above the direct and indirect economic benefits we created through local employment and the procurement of goods and services from local businesses.

In 2019, a wide range of community activities were initiated or supported, some of which are reported below, linked to the specific Sustainable Development Goals (SDGs) relevant to the activity.

1. **Dreamland Garden feasibility study** – SDG 2 Zero Hunger: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
   - Assess feasibility of desert based agriculture
     - o Assess types of vegetables
     - o Including access to markets

2. **Taking Women-in-Mining (WiM) to our Communities** – SDG 5 Gender Equality: Achieve gender equality and empower all women and girls
   - "A chief is a chief through her people" project
   - Mentorship programme with learners at Rössing Foundation centres in Swakopmund and Arandis, paired with mentors from the mine

3. **Namibia Desert Environmental Trust (NaDEET)** – Sustainable Resource Use – SDG 15 Life on Land: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

- Climate change initiative
- Adaptability in resource use
- Daily markers on environmental footprint
- Incorporate learnings into daily living
- Exposing top performing grade 10 learners to new opportunities (careers, life skills, different lived environment)

4. **Annual School Prize Giving Ceremonies** – SDG 4 Quality Education: ensure inclusive and equitable education and promote lifelong learning opportunities for all

- Support to deserving learners at identified schools
- Rekindling the Rössing Uranium culture of supporting education by rewarding merit worthy activities

5. **Donation of pallets to Regional COSDECs** – SDG 9 Industry, Innovation and Infrastructure: Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

- Support learners at the centres
- COSDEC's focus is vocational training to marginalised communities – our support aids in providing teaching equipment for the joinery classes

6. **Project Shine** - SDG 12 Responsible consumption and production: Ensure sustainable consumption and production patterns

- Annually we support the Swakopmund Municipality with a 4x4 vehicle and a member of our Environmental team to assist with the evaluation of the identified areas of the project.
- Main objectives are two-pronged: the clean-up campaign and an awareness/education campaign.
- Focus areas are the main road between Swakopmund and Arandis; beaches from Swakopmund to Henties Bay, Swakop River mouth and certain sections of the desert to the east of Swakopmund (areas that are impacted by rubbish from the dump site).

7. **Environmental Clubs** – SDG 2 and 12: Support learners at school to increase their awareness of growing vegetables for own use at home

- Also expanding on their contribution to keeping their lived environment clean as they participate in own and local authority organised activities
- Supported Westside High School in Swakopmund with shade netting for their garden facility at the school
- Supported Namib Primary School in Swakopmund with a recycling separation-at-source bin system

INTERNAL AND EXTERNAL COMMUNICATION ACTIVITIES

Informing both our internal and external stakeholders about our operations is one of the key enablers in our business success. It is the task of the Partnerships, Communication and External Affairs department to implement various platforms, initiatives and activities to establish, nurture and maintain good relationships and promote the sharing of information with our stakeholders.

In 2019, a number of strategic communication activities were implemented to disseminate information about Rössing Uranium via a variety of channels in the print and electronic media, as well as by means of face-to-face communication.

A key event during 2019 was the sharing of information with our stakeholders on the sale of Rio Tinto's majority shareholding in Rössing Uranium to the China National Nuclear Corporation (CNNC) to become the new majority shareholder on 16 July 2019.

We also kept the Namibian Government informed about our corporate business strategy. This was accomplished through the mine's senior management engaging politicians and senior officials on a number of matters of mutual interest, as well as working closely on information campaigns with the Chamber of Mines of Namibia and the Namibian Uranium Association.

At a number of stakeholder engagements hosted by Rössing during the year, we shared information about our business performance with the Namibian business community. Other communication activities involved a variety of external stakeholders through trade and career exhibitions, while Rössing's website presents information to a world-wide audience.

Media relations were facilitated through the management of various media enquiries, which is an opportunity to create balanced coverage of our operations and business activities.

Our visitors' programme is a key means of engaging guests from around the world. Besides members of the public, the programme accommodates specialists, academics and government officials. In 2019, we hosted 37 groups at the mine with a total of 937 visitors, almost double the number of visitors compared with 2018.

In line with our drive to promote healthy habits and support positive lifestyles in the community, we sponsored the 28th Rössing National Marathon Championship in 2019, with Swakop Striders Athletics Club hosting the event. The 29th marathon took place on 8 February 2020 with a record number of 700 entries received. The competitors participated in a 42.2 km marathon, the Frank Slabbert half-marathon over 21.1 km and a 10 km race. A 5 km fun walk was held in support of the Cancer Association of Namibia and attracted more than 300 walkers.

Chinese Ambassador to Namibia, HE Zhang Yiming, takes a selfie with Rössing National Marathon Championship participants early in 2020.

The Dreamland Gardening Project is one of the Rössing Foundation's initiatives to promote desert agriculture. The project is already supplying fresh vegetables to the Arandis community and to supermarkets in Swakopmund.

THE RÖSSING FOUNDATION

Report by Job Tjiho, Executive Director, Rössing Foundation

www.rossingfoundation.com

The Rössing Foundation

The Rössing Foundation was established in 1978 through a Deed of Trust as a vehicle to oversee and implement many of Rössing Uranium's corporate social responsibility activities in Namibia. The Rössing Foundation implements programmes and projects under the following mandates:

Education	Education Benefaction	Livelihood and Enterprise Development	General Directives
To further the education of all Namibians in order to achieve greater national productivity and to enhance lifelong learning	To encourage the creation and/or to create opportunities for people to use their education	To promote the advancement of the living standards of all the people in Namibia	To do any act or thing, which in the opinion of the Trustees, shall benefit Namibia or any or all of its inhabitants

EDUCATION DEVELOPMENT PROGRAMME

The Rössing Foundation has been working in partnership with the Ministry of Education, Arts and Culture since Namibia's independence in 1990. The partnership encompasses activities such as strengthening the capacity of teachers and learners, leadership and management programmes, resource sharing and exchanging expertise and best practices between the partners.

The Rössing Foundation continued to manage its three English, Mathematics and Science centres in the towns of Arandis and Swakopmund in the Erongo Region, and in Ondangwa in the Oshana Region.

In addition to these centres, the Rössing Foundation managed the English, Mathematics and Science mobile laboratory which travelled to many areas of the country. The mobile unit greatly benefitted rural schools, as many teachers and learners cannot afford to travel to the centres. The centres and mobile laboratory will continue to serve as the hub of support programmes, not only for learners and teachers, but also for Namibian communities.

TEACHERS' SUPPORT PROGRAMMES

The Rössing Foundation regards support for teachers to be vital, as a single, well-equipped teacher is able to benefit up to a minimum of 30 learners. Teachers' support programmes are conducted either at a centre or through the mobile unit on school visits to rural areas as part of Rössing Foundation's national outreach programme.

A total of 498 teachers benefitted from the Rössing Foundation Teachers Support Programme. It is quite satisfactory that for the first time the support to the English teaching cohorts have increased at all the centres, but more so at the Ondangwa Centre.

LEARNERS' SUPPORT PROGRAMMES

The Rössing Foundation's three education centres remain popular among learners. In addition to on-going support provided to learners from different schools in the English language, Mathematics and Science.

The focus of the Rössing Foundation support on the Junior Primary level was to strengthen the reading competencies of the learners in Arandis, Ondangwa and Tamariskia. In total, 335 learners were supported and improved their reading competencies. In addition, 107 pre-primary learners benefitted from the reading programme in Arandis.

On Senior Primary level, a total of 6,868 learners benefitted from the programmes offered at all the Rössing Foundation Centres. It should be noted that some learners attended classes on a regular basis throughout the year, while others attended sporadically and according to specific needs.

On Junior Secondary level, a total of 3,082 learners acquired new knowledge and skills in English at all the centres. The centres experienced fewer Grade 8 learners compared with other grades. This is an indication of learners adjusting to difficult content as the subjects are becoming more challenging.

A total of 9,896 learners on Senior Secondary level benefitted from the Rössing Foundation English, Mathematics and Science programmes at the Arandis, Ondangwa and Tamariskia Centres in 2019, surpassing the targeted number of learners.

Three schools supported by the Rössing Foundation had the opportunity to meet two Chinese astronauts during the school holiday in Swakopmund. They were further exposed to the operations of the Chinese Telemetry Tracking and Command Station Centre outside Swakopmund.

LIBRARY SERVICES TO THE COMMUNITY

The main purpose of the Rössing Foundation's libraries is to ensure that learners, teachers and other community members have access to information through books. Improved reading skills are conducive to good results at school and deepen general knowledge as well. In total, 36,475 learners used the library services during 2019 and 765 became library members. The library was used by 400 teachers, while 13,120 general community members benefitted from the library. In terms of book usage, a total of 2,836 books were borrowed and 2,020 were returned.

The Rössing Foundation libraries are located in the vicinity of the communities they serve. Learners and other members of the communities of Arandis, Ondangwa and Swakopmund make use of the libraries on a daily basis to study, conduct research on projects, and do homework. It should be noted that the Rössing Foundation libraries in Arandis and Ondangwa are the only facilities that provide that service to those communities. However, the Ministry of Education, Arts and Culture still continued to honour their pledge of many years ago by providing human resources, as well as materials to the libraries in Arandis and Ondangwa.

In total, 51,256 learners, teachers and other members of the communities derived benefits from the libraries in Swakopmund, Arandis and Ondangwa. These beneficiaries would not have benefitted from such services in the absence of the Rössing Foundation libraries.

SOCIAL ACCOUNTABILITY AND SCHOOL GOVERNANCE PROGRAMME

The training of the Master Trainers of School Boards was conducted in September 2019 in Windhoek. The objective of the training was to enable the Master Trainers to use the Social Accountability and School Governance Tools to empower School Board Trainers to be able to capacitate school boards in their regions, circuits and schools.

The Master Trainers included three consultants and three Rössing Foundation staff, comprising of the Executive Director, Chief Education Officer and Coordinator of the Outreach Programmes. Two UNICEF staff members and one from charity organisation Star-for-Life also attended the training in an observation and support capacity.

The School Board training for the Kunene Directorate of Education was conducted in October 2019 in Khorixas, whereas two training sessions were held in November for the Oshana School Board groups in Oshakati and Ondangwa respectively. It is envisaged that the training will be extended to the Ohangwena Region in the next reporting year.

MOBILE LABORATORY OUTREACH PROGRAMME

During 2019, the mobile laboratory benefitted 992 learners and 23 teachers ranging from Grade 4-7 and Grade 8-10. Due to financial difficulties experienced by the Regional Education Directorates, the Rössing Foundation could only assist Kahenge Combined Secondary School three times in 2019.

However, the Rössing Foundation also held training for the Senior Education Officers of Kavango West's Education Directorates in the approaches and methodologies as applied by the Rössing Foundation Education Officers in the efforts to improved learner results.

The same school also benefitted from the introduction and piloting of the Mobile Planetarium programme.

A follow-up support visit to Kahenge Combined School in Kavango West Directorate of Education was conducted in July, after an earlier visit in June that identified the need for more support in terms of ensuring that effective teaching and learning is taking place. A total of 23 teachers were trained during both support visits.

ÛIBA ÔAS CRYSTAL MARKET COOPERATIVE

Situated on the main road between Usakos and Arandis, the Ûiba Ôas Crystal Market is being managed by the Ûiba Ôas Cooperative, with support from the Rössing Foundation. Teams from both the Foundation and the Cooperative are working together to establish an improved electrical power supply to the small-miner settlement. To this end, the Embassy of the United States has provided funds to purchase a solar power supply system. The installations have started and new solar panels have been installed; the rest of the system is to be finalised in the next reporting year.

The Cooperative is working with a Namibian architect to develop a multi-purpose community centre that will also house a kindergarden and be a venue for cultural events and community gatherings.

In addition, the Cooperative, supported by the Rössing Foundation, is investigating feasible options to bring water supply to the market, which is crucial to the development of the community. Discussions were held with various stakeholders to identify the best long-term solution to the community's continual water challenges.

ARANDIS SMALL AND MEDIUM ENTERPRISES SUPPORT TO DREAMLAND GARDEN ENTERPRISE

The Rössing Foundation continues to work with the Dreamland Garden members to improve the day-to-day operations of the community garden. The enterprise is now flourishing as water becomes reliable and it continues to sell its produce to local shops and individuals in Arandis. However, the sustainable water supply needs to be formalised and the team is busy engaging Arandis Town Council in this regard.

COSDEC TRAINING ENTREPRENEURS

The Rössing Foundation assisted 13 Arandis SMEs with SME Basic Small Business Development, aiming to empower women with job application and interview skills. As part of the Empowering Erongo Young Women Project, eight participants completed the 'Jobs-ready Workshop' in July.

COMMUNITY INVOLVEMENT ACTIVITIES IN ARANDIS

The Rössing Foundation does not only work directly with SMEs, but also recognises that indirect help through community involvement is key to developing and maintaining a strong SME environment. The Rössing Foundation team is currently cooperating with the Arandis Town Council on plans to renovate the amphitheatre in Arandis, as well as to re-establish an urban park in the town. The plans were submitted to the Council. Suggestions were also made to turn the defunct swimming pool into a fountain park attraction. This idea was also well received.

BUILDING CULTURAL BRIDGES PROGRAMME

The programme aims to link secondary school learners with their counterparts in the United States of America (US) through teleconference facilities/equipment. The first 'Building Cultural Bridges' video conference took place with 20 learners from Westside High School and two English teachers, linking up with students in Buffalo and Jamestown New York in the US. Learners were able to talk and discussed subjects and social issues with their New York-based friends. The project plans will also be introduced at the Rössing Foundation's Arandis and Ondangwa Centres.

ERONGO DEVELOPMENT FOUNDATION PARTNERSHIP

The overall performance of the Erongo Development Foundation (EDF) loans as received from local banking partner, Bank Windhoek, was presented to EDF Board of Trustees. Eight clients from the Dâures, Karibib and Arandis constituencies have defaulted on their loans and were referred to their legal department for collections. The EDF Board approved the recovery of the 60 per cent from the EDF Guarantee Fund. The Rössing Foundation, as one the major contributors to the collateral fund, recommended revisiting the referral approach that has become the order of the day and urged the Board members to find a realistic strategy that will strengthen the scheme.

OKOMBAHE DEBUSHING PROJECT

The Rössing Foundation and the Erongo Regional Council (Dâures Constituency Office) organised a study visit to Omaheke and Otjozondjupa regions for the enterprise beneficiaries. Four project representatives participated and were exposed to various bush value chain activities at four different operations.

A study tour was initiated to Farm Langbeen, a private farm located outside Dordabis. The members were exposed to theoretical and practical activities relating to making animal fodder from bush, including general forage production and pelleting.

Project representatives of the Okombahe Debushing project attended practical training sessions on the safe operation of debusing machineries.

The Vergenoeg project east of Gobabis is a community-based enterprise and a sister project to Okombahe project funded by Social Security Commission Development Fund under the auspices of the Omaheke Regional Council. Participants were able to witness wood harvesting, processing and packaging.

The Cheetah Conservation Fund (CCF) is a conservation organisation based near Otjiwarongo. The participants were exposed to high-level technology wood processing, including charcoal and bush blocks.

Nine enterprise members attended a practical training sessions on the safe operation of debushing machineries. After their training, they commenced with wood production, particularly fodder, poles and fencing poles (droppers) in Okombahe, with the target to produce 40 bags of chipped materials per day for the first three months.

The Office of the Erongo Governor was briefed on Rössing Foundation programmes in the Erongo Region. The meeting resulted in a decision to officially launch the Okombahe Enterprise, which took place on 21 November 2019. The official launch of the enterprise was attended by high-ranking officials.

OSHIKUKU PROJECT

As part of the Oshikuku project, the planting and transplanting of maize seedlings continued with an additional 200 m^2 plot of maize completed. The members harvested the first produce and sold it to the community in the town of Oshikuku and the surrounding villages. The search for organic manure continued unabated and during November, goats, chicken and pig manure was delivered at the site.

Nine members of the Oshikuku project undertook an exchange visit to a community garden at Onampira in Omusati Region during November 2019. The visit was fruitful as the farmers were exposed to different gardening techniques such as watering patterns, seedbed preparation, fertiliser application, harvesting, and marketing.

PILOTING THE MOBILE PLANETARIUM OF THE AFRICA MILLIMETRE TELESCOPE (AMT)

The Mobile Planetarium was piloted at the Mokganedi Thlabanelo Senior Secondary School in Omaheke Region, and the Kahenge Combined School in Kavango West Region. It is an educational medium and will assist teachers and learners to explore astronomy (planets and stars), thereby making abstract concepts more concrete and, in doing so, encouraging learners to pursue scientific careers at tertiary institutions.

The Rössing Foundation has been selected as a partner with Radboud University and NOVA, both institutions from the Netherlands, and the University of Namibia in the implementation of the Mobile Planetarium of the Africa Millimetre Telescope Outreach programme. The roll-out of the project will commence in September 2020 and will form part of the Rössing Foundation National Outreach programme. The project will run over five years with the vision of covering most schools in Namibia.

An *Adenia pechuelii* (elephant's foot) that was rescued from the mine's operations area and replanted at the off-site safety training centre.

Protecting the environment

Rössing Uranium is committed to protecting the environment in which we operate. Measures include a wide range of preventative monitoring activities.

We have a particular focus on water management and monitoring, especially in light of the extreme rainfall conditions associated with the Erongo Region's water-scarce, hyper-arid climate. We have a strong history of engagement and co-operation with our regulators and other stakeholders to ensure that the environment remains protected.

We manage impacts on the environment with guidance from, among others, Namibian legislation, the ISO 14001 Environmental Management System, Rössing Uranium's performance standards and international best practices. Through transparent reporting we provide our stakeholders with the assurance that our environmental impacts are monitored and the necessary mitigation measures are in place to keep our environmental impacts minimal.

Our environmental management performance, measured against set objectives and plans, is discussed in the following pages.

WATER MANAGEMENT

Water management at Rössing Uranium is guided by a formal water strategy, a water management plan and a Rössing-specific environmental standard on water usage and quality management.

These three management tools cover all activities related to water abstraction, transport, storage and usage (potable and process), as well as impounded water and groundwater. The intent of the standard is to ensure efficient, safe and sustainable use and protection of water resources and ecosystems.

In addition, Rössing Uranium adheres to all aspects pertaining to water in the Constitution of the Republic of Namibia. To that effect, we operate with a Waste Water and Effluent Disposal Exemption Permit 674 (valid until January 2021) and Water Abstraction Permit 10200 (valid until January 2021).

Knowing that our water requirements are substantial, our focus is on the sustainable and accountable use of this scarce and valuable resource, with minimal adverse effect on the environment.

We carry out various continuous monitoring activities, which include:

- taking frequent flow-meter readings at various points in the Processing Plant to provide a continuous overview of our water balance data;
- taking frequent water level measurements on our Tailings Storage Facility (TSF) and numerous monitoring locations across the mine site, extending to the Khan and Swakop Rivers; and
- conducting water-quality sampling at various locations (starting at the source, the TSF) which we use to understand changes in water chemistry due to chemical reactions in the heterogeneous environment.

All spillages in the Processing Plant are captured and channelled to a large recycle sump for reuse. Effluents from the workshops are treated to remove oils and sewage is treated in the onsite sewage plant. These purified effluents are used in the open pit for dust suppression.

On the deposition pool (active paddy) of the TSF, water is recycled and reused on a continuous basis in the Processing Plant, minimising evaporation and infiltration into the tailings pile. Remaining water that has infiltrated is recovered by pumping boreholes and open trenches installed on the facility itself to reduce the volume of underground water within the tailings pile.

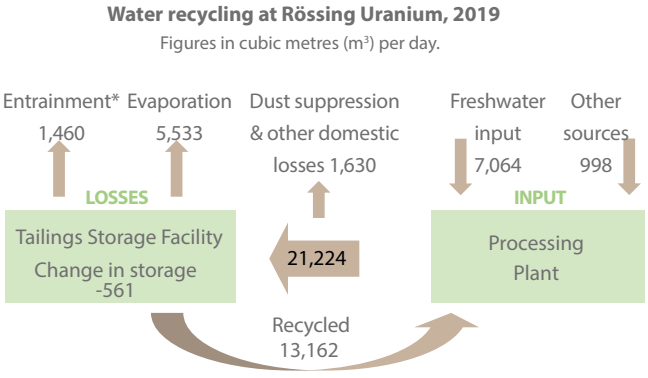
Seepage control systems are also employed outside the TSF. They include a surface seepage collection dam to capture water from the engineered tailings toe drains, cut-off trenches in sand-filled river channels, dewatering boreholes situated on geological faults and fracture systems on the downstream, western side of the facility. All systems are designed to lower the water table to the extent that flow towards the Khan River is interrupted. The recovered water is reused in the Processing Plant.

FRESHWATER USE

Our water demand is met by the national bulk water supplier, NamWater, via a pipeline from the base reservoirs in Swakopmund. Fresh water supply continues to be a challenge for our operation, as our demands are not always met due to engineered or otherwise natural challenges experienced by the suppliers.

In 2019, the total freshwater usage target was set at 2,883,500 m^3 of freshwater for all its operations.

Figure 11: Overview of Rössing Uranium's water balance, 2019



* Water entrainment is the permanent loss of water to the pore spaces of the tailings material and is not recoverable anymore.

The actual consumption of fresh water came to 2,578,388 m^3, which is 10.42 per cent below the planned target. The savings were made possible through continuous improvement efforts on our recycling methods, which comprised 62 per cent of the total water usage (see Figure 11).

Monthly fresh water usage, as depicted in Figure 12, was below plan for most of the months. Worth noting however, is that we had to adjust our scheduled annual maintenance plans of July for August, to align with maintenance schedules of our water suppliers planned for the later timeline – which explains the swap in the planned against actual observed in the two months mentioned.

On average, we did not meet the target on freshwater usage per tonne of ore which was set at 0.3 with 0.322 m^3/t recorded. High calc ore throughput from mining negatively impacted water recovery with more water required to pump slimes to the TSF. In addition, calc reduced return-dam solution recovery and also reduced water infiltration through the TSF, resulting in less recovery at the seepage dam. Subsequently, more freshwater had to be supplemented to the system, which resulted in increased freshwater usage per tonne of ore when compared with the target.

Freshwater consumption performance from 1984 until 2019 is depicted in Figure 13.

WATER-QUALITY MANAGEMENT PROGRAMME

Acknowledging our impacts and its inevitable influence on the environment, Rössing Uranium established a network of monitoring sites, which begins at the TSF and extends to the Khan and Swakop Rivers.

Many of these monitoring sites were established over 30 years ago, which, when combined with the harsh weather conditions, exposes steel structures (borehole collars) to rust induced corrosion.

This necessitated maintenance work to be done. In 2019, selected groundwater monitoring boreholes underwent structural refurbishment, which entailed replacement drilling of dilapidated boreholes beyond rehabilitation. The project involved drilling 14 replacements boreholes with information based on down-the-hole camera surveys. It is envisaged that the completely refurbished borehole network will continue to render important information relating to groundwater located within the mine's area of influence and operations.

KHAN RIVER WATER USE

Saline groundwater from the Khan River aquifer, in conjunction with biodegradable dust suppressant polymers, is used for the purpose of haul-road dust suppression in the open pit. A total of 141,985 m^3 of water was abstracted from the aquifer during 2019, which is 16 per cent of the permitted 870,000 m^3 per year.

Figure 12: Freshwater use per month, 2019 (cubic metre)

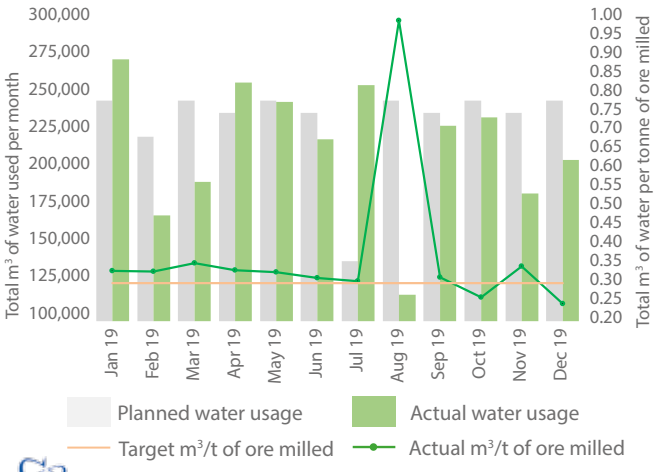
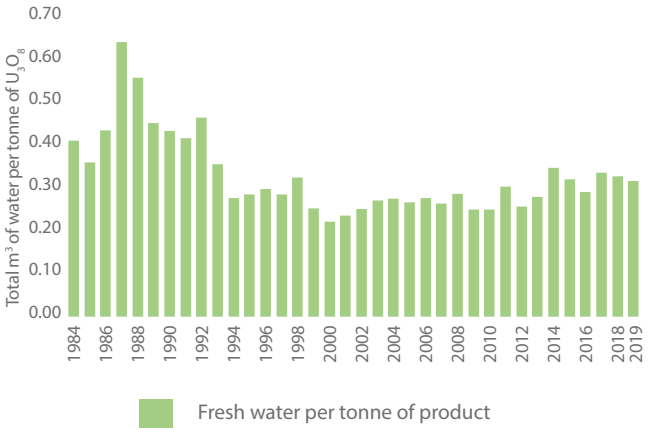


Figure 13: Volume of fresh water consumed per tonne of U_3O_8 produced, 1984-2019 (cubic metre)



Although we abstract a low portion of the permitted volume, we continue to monitor the vegetation and water levels in the Khan River to prevent over-abstraction, based on the ecosystem response.

In compliance with the abstraction permit conditions, annual reports derived from the water-level and vegetation-monitoring programmes are sent to the Ministry of Agriculture, Water and Forestry's Directorate Water Resources Management.

AIR-QUALITY MANAGEMENT

Rössing Uranium is committed to protect the environment from the harmful effects of air pollution caused by its mining activities.

Dust is generated during blasting, loading and dumping of ore and waste, as well as during the crushing and conveying of ore. Winds at speeds above 30 km/h potentially erode fine particles from rock dumps and the TSF and disperse them in the environment.

In addition, noise and ground vibrations are created during blasting which is conducted when required, while the machinery deployed in the open pit and the Processing Plant generates noise continuously.

Dust particles can be so small that they get airborne easily causing environmental effects such as:

- reducing visibility;
- stain and damage buildings;
- increase acidity in water bodies; and
- deplete the soil and damage plants.

Therefore, dust emissions, noise and ground vibration created during mining activities, requires an understanding on the impact it has on the people and the environment. Hence, an Air-quality Monitoring Programme (AQMP) is in place to measure and monitor air pollutants in the area and its surroundings. This guides us in implementing programmes to help reduce these impacts.

WIND ROWS BREAK AIR FLOW AND HELP PREVENT DUST TO GET AIRBORNE EASILY

Rössing Uranium mine is situated in an arid area with winds that are generally moderate to strong, frequently reaching speeds of 30-40 km/h. Dust emission, generated by the wind, has been identified as one of the risks at Rössing, especially at the Tailings Storage Facility (TSF) in the dry and redundant paddies. These dry paddies at TSF are covered with fine dust.

Due to the location of the Tailings Facility, the wind can distribute the dust into the ambient environment.

To manage and minimise the airborne dust emission at the dry or redundant paddies, wind rows are prepared using heavy equipment. These wind rows are of a specific design, which break prevalent air flow over the paddies, and therefore help prevent dust to get airborne easily (see photograph on the next page).

ENVIRONMENTAL DUST

Rössing Uranium is located in a desert environment and the climatic conditions makes dust an inevitable reality in the mining operations such as ours.

Dust emissions are of concern to residents of Arandis and Swakopmund, especially when high-velocity winds occur during the winter months. To quantify dust fallout and allow mitigation when necessary, the Air-quality Monitoring Programme (AQMP) is in place. Measures are taken to ensure that exposure levels do not exceed the adopted occupational limits and that the controls efficiently detect differentiations resulting from process changes.

Two types of dust are measured: firstly, a very fine dust invisible to the naked eye that is comprised of particulate matter less than 10 micron (known as PM_{10}), and secondly, fallout dust, which is visible on the ground and comprised of larger particles, including PM_{10}.

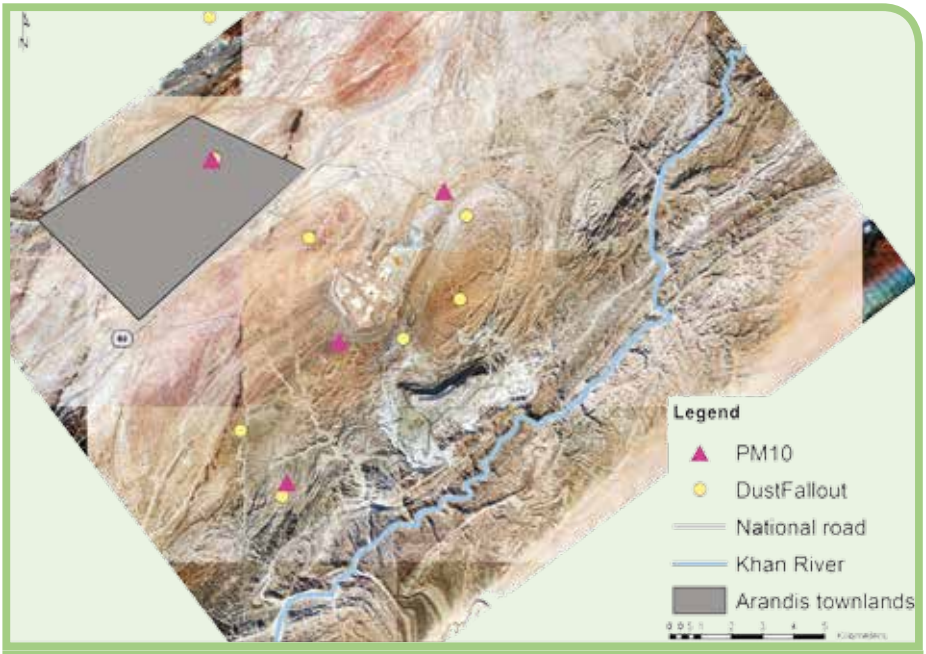


Figure 14: The map shows the PM_{10} dust monitoring network samplers and dust fall-out buckets.

Vistorina Nangolo, Environmental Advisor: Air Quality, at the wind rows on the Tailings Storage Facility. To manage and minimise the airborne dust emission at the dry or redundant paddies, wind rows are prepared using heavy equipment. These wind rows are of a specific design, which break the prevalent air flow over the paddies, and therefore help prevent dust from getting airborne easily.

The measurement of PM_{10} is the weight of particles less than, or equal to, ten micrometres in diameter in one cubic metre of air.

We continuously monitor PM_{10} dust levels at four monitoring stations: three onsite and one in the nearby town of Arandis (see Figure 14, denoted by pink triangles).

As part of the best practices and standards implemented at the mine to improve adaptive management and understanding of the ambient dust contributing activities, real time data loggers or remote communication for the PM_{10} monitoring stations were recently installed.

This allows immediate investigation and observation of the current actual conditions and assist us in advising on improving our controls, as well as linking visual events to the results instantly. It also helps with the visibility on functionality of equipment for a prompt response towards maintenance, which improves data availability.

The levels measured in 2019 showed that PM_{10} dust concentrations at all stations were below the adopted World Health Organisation standard of 75µg/m³, (see Figure 15). There were no records for the tailings station for the first months of the year, as it was faulty.

Fallout dust is measured at six stations at different locations along the mine boundary (see the yellow dots on the map, Figure 14). The dust-fallout limit is 600 mg/m² per day with an annual average target of 300 mg/m² per day as required by the adopted World Health Organisation standard. Values measured during 2019 at the six stations ranged between 5 and 104 mg/m² per day with an annual average of 17 mg/m² per day (see Figure 16). All measured deposition rates were well below the selected or adopted South African dust-control regulation.

Figure 15: Monthly average PM_{10} dust concentration, 2019 (milligramme per cubic metre)

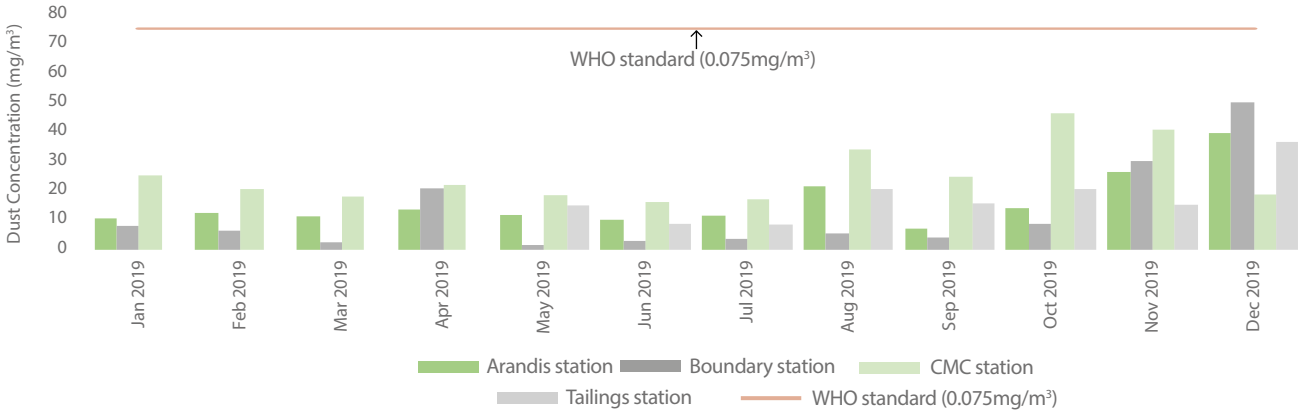
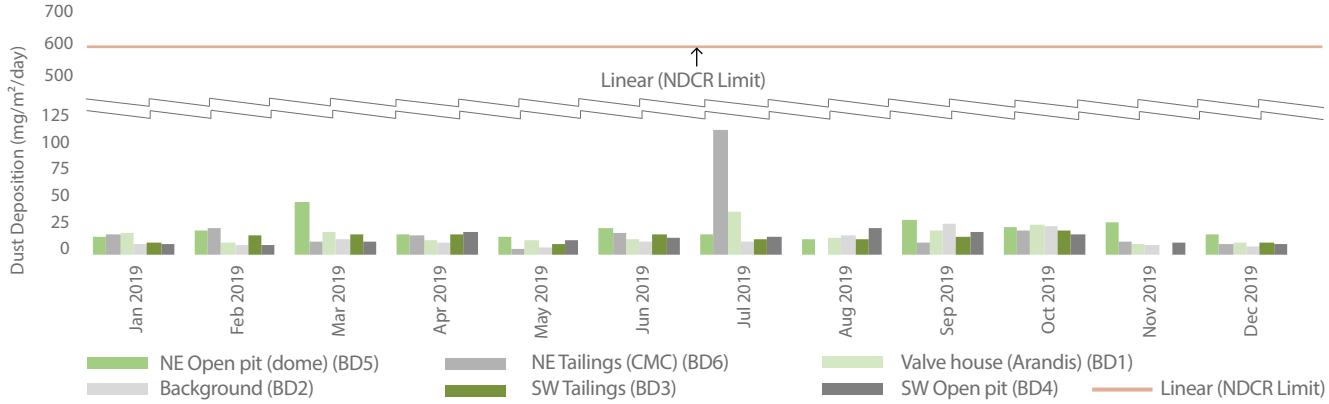


Figure 16: Monthly average of daily dust deposition rates at the mine boundary, Jan-Dec 2019
(milligramme per square metre per day)



NOISE AND VIBRATION

In the absence of Namibian legislation on environmental noise and vibration, Rössing Uranium has adopted or made reference to the acceptable standards of the United States Bureau of Mines (USBM) RI 8507 criteria for safe blasting, and for operational noise the relevant South African National Standards (SANS) - Code of Practice, SANS 10103:2008 (SANS, 1992).

Noise and vibration are monitored through a network of various points and studies. Environmental noise is monitored according to a specific procedure and reported on a monthly basis to minimise noise to threshold levels and identify events when these levels are exceeded.

Throughout 2019, both air-blast and ground vibration levels have been consistently below the limits of 134 dB and 12.5 mm/s, respectively (Figure 17). Blasting is only carried out in the open pit, and monitored at two places, namely one onsite and one offsite in Arandis.

Environmental noise is measured over snapshots of ten minutes at six different sampling points or stations, namely as Station 1 - Rössing Main Mine Access Road, Station 2 - Arandis Airport Gate, Station 3 - Khan River Valley, Station 4 - Khan River Rock Island, Station 5 - Khan River Bed and Station 6 - Khan River Bed.

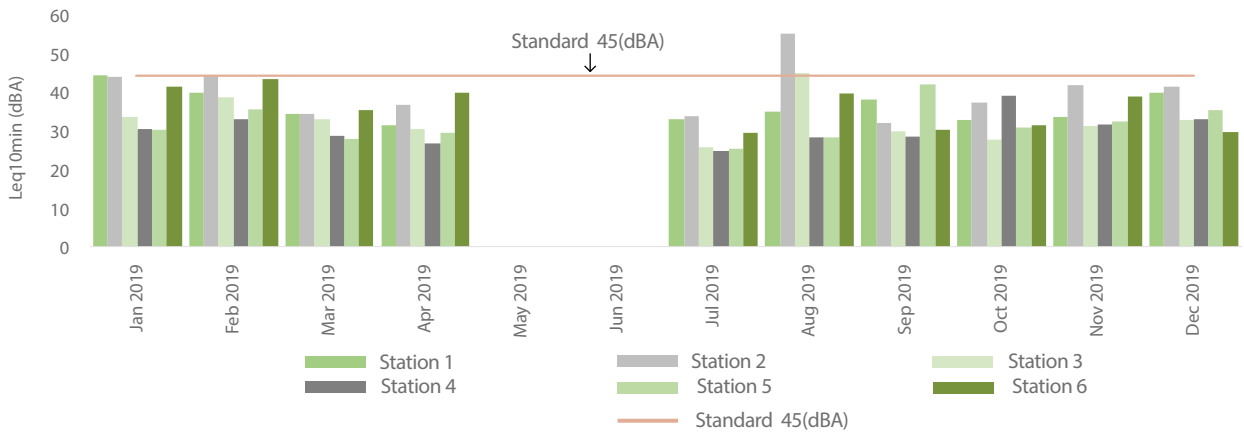
Ten noise measurement campaigns were conducted throughout 2019, with no measurements in May and June due to the instrument being send away for calibration. All noise measurements were below the Rössing internal noise level of 45 dBA, except in January (Station1) and August (Station 2 and Station 3) due to strong winds, aeroplanes and cars driving to the airport, all of which could not be associated to Rössing's mining activities.

ENERGY EFFICIENCY AND GREENHOUSE GAS EMISSIONS

As part of its environmental commitment and the priority given to protecting the environment, Rössing measures and manages its greenhouse gas (GHG) emissions and energy intensities. This assists in improving energy efficiencies and reduce GHG emissions.

Sources of GHG emissions at Rössing Uranium include electricity and fuel consumption, the transportation of reagents and uranium oxide, blasting (use of explosives), waste management areas (the sewage plant, rubbish disposal and landfill site), and the extraction and processing of ore. The intensity of emissions is reported per unit of uranium oxide produced.

Figure 17: Environmental noise over a period of 10 minutes, 2019 (Leq I (equivalent continuous A-weighted sound pressure level, Leq I using the 'I' (Impulse)) 10 min (dBA))



In 2019, the total energy consumption of the mine was 1,297,556.63 GJ for 2,449 tonnes of uranium oxide drummed. This converts to an annual energy consumption of 530 GJ per tonne (GJ/t) of uranium oxide produced, which is 21 per cent above the projection target of 438 GJ per tonne uranium oxide produced. Energy consumption shows an increase from 2018 to 2019 which could also be linked to the ore grade that has increased from 0.35kg/t in 2018 to 0.37kg/t

Emissions of carbon dioxide (CO_2) per unit of production in 2019 amounted to 61.86 tonnes of CO_2 equivalent per tonne (CO_2- e/t) of uranium oxide, which is above the target of 39 tonnes CO_2-e/t of uranium oxide for the year (see Figure 19) and this could be linked to the same reason of ore grade that has increased.

Figure 18: Energy consumption, 2015-2019
(gigajoules per tonne of U_3O_8 produced)

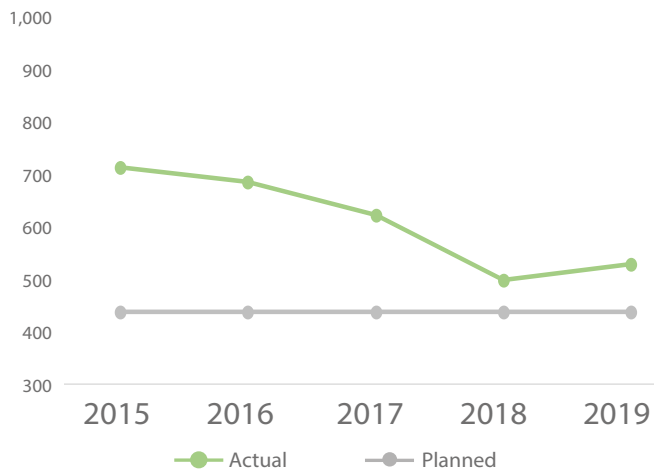
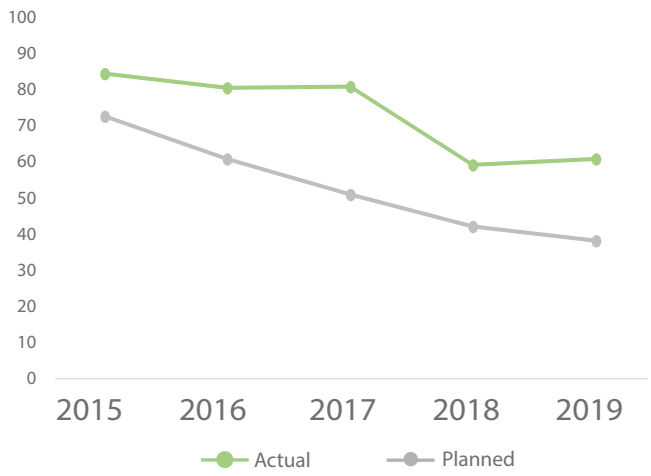


Figure 19: Carbon dioxide emissions, 2015-2019
(tonnes of CO_2 equivalent per tonne of U_3O_8 produced)



BIODIVERSITY MANAGEMENT

Rössing is dedicated to managing impacts associated with its operations to the environment and ensure the impacts are managed in accordance with regulatory commitments. Rössing ensures that the impacts on biodiversity and natural resource features are understood, and then preferentially avoided, minimised and rehabilitated, whilst seeking opportunities to collaborate with surrounding communities for an integrated approach to mitigation wherever possible.

Goals with respect to biodiversity include the management of risks that the mine's actions pose to biodiversity and natural resources, as well as risks of non-compliance with relevant regulations. In addition, we pursue conservation opportunities that improve the conservation of biodiversity, build and continuously improve stakeholder relations, whilst planning effectively for closure.

In 2019, Rössing was involved in various biodiversity awareness surveys and assessments that were aimed at understanding and protecting biodiversity. We continued to be proud members of the Namibia Environmental and Wildlife Society (NEWS), which give us opportunities to contribute to conservation in Namibia. Our goal is to create a positive impact on biodiversity and to contribute to conservation in Namibia at large.

BIRD WATCHING EVENT

We celebrated the 18th year of Rössing's annual bird-watching day in 2019. The bird-watching event is celebrated as part of the United Nations International Day for Biological Diversity and World Environmental. The event aims to give participants an experience to view the unique birdlife, and to promote a long-term interest in birds, linked to conserving local and wilderness biodiversity.

The learners from local schools remain the nucleus of environmental education activities. A total of 95 learners and teachers participated. Rössing worked closely with the Coastal Environmental Trust of Namibia to promote coastal biodiversity conservation on the day.

ALIEN VEGETATION MANAGEMENT

Rössing, in collaboration with the National Botanical Research Institute (NBRI), a subdivision of the Ministry of Agriculture, Water and Forestry, conducted an alien vegetation assessment in 2019. The assessment aimed at identifying and mapping alien vegetation of ML28 (the Rössing mining license area) and developing a management plan that will manage the invasion of alien vegetation on the land under our custodianship.

The alien vegetation was rated as moderate due to its distribution, severity and likelihood of disseminating in the area. Species with high degree of ecological impacts on the environment, such as high water-utilisation requirement, invading and encroachment potential were prioritised to be managed. Species such as the *Nicotiana glauca* and *Prosopis* species that forms part of Namibia's 'Nasty Nine' (alien invasive species) will be managed according to the Rössing Alien Vegetation Management Plan.

SNAKES AND SCORPIONS RECORDED IN 2019

Rössing records the number of snakes and scorpions observed on the mine premises in order to understand the risk and the types of snakes and scorpions employees are exposed to. This understanding helps to develop measures to manage these risks.

In 2019, a total of 11 snakes and 14 scorpions were observed. Only three types of snakes were observed: the western sand snake, the puff adder and the black spitting cobra. The most frequently observed snake in 2019 was the puff adder. The other two species of snakes were mostly observed in the juvenile stage, whilst one black spitting cobra was an adult.

The *parabuthus* (common name: black hairy thick-tailed scorpion) was the most frequently observed scorpion species during 2019. (*Parabuthus* is a genus of large and venomous Afrotropical scorpions that show a preference for areas of low rainfall.)

POWERLINE SURVEY

Direct avian mortality from collisions with power transmission lines is one of the impacts that needs to be monitored. Since 2015, three power lines at the mine were monitored on a quarterly basis. In 2019, no bird mortality was observed.

The outcome of the avian mortality monitoring feeds into the national plan of monitoring and managing power-line/bird interactions, which in turn is incorporated into the bird/wildlife mitigation patterns that impacts on the planning of future power-line networks through the NamPower/Namibia Nature Foundation strategic partnership.

PROGRESSIVE REHABILITATION

The progressive rehabilitation work continued in 2019 in the Dome gorge. The dome gorge is a watercourse that flows in a north-to-south direction towards the Khan River and it was substantially disturbed during the construction phase of the mine. The Upper Dome gorge has been identified as the highest priority site for progressive rehabilitation. It is available for rehabilitation during operational phase as there is no intention to disturb this area in future.

Soil samples were collected in the area and sent for geochemical analysis to determine if there is any form of pollution and to determine the level of soil fertility.

Determining pollution at disturbed areas is one of the rehabilitation tasks that determine if an area requires remedial actions or if the area is suitable for plants and invertebrates to recolonise.

The results from the analytical laboratory were compared to the 'Total Concentration Threshold (TCT) Limits of National Norms and Standards for the Assessment of Waste for Landfills Disposal' of the National Environmental Management: Waste Act, 2008 (Act no. 58 of 2008) of South Africa. In the absence of national and South African standards for uranium, the Canadian 'Soil Quality Guidelines for the Protection of Environmental and Human Health' (2007) was used.

The analysis showed that the concentration of the heavy elements indicated to be below TCT1 level; the leaching concentration of the anions were also below the leaching concentration threshold (LCT1). The presence of hydrocarbons was below the detection limit in the area. The organic content of the soil was within the range of the expected levels of desert soil and there have been annual and perennial plants such as dollar bushes that were observed in the gorge, indicating the ability for plants to recolonise and thrive.

WASTE MANAGEMENT

Mining operations are resource-intensive, consuming land, water, power, fuel, chemicals and construction materials to extract the metal held by the ore body. During the ore mining and metal refining processes, waste materials are produced, which consist of mineral wastes in the form of rock and process tailings, and other waste products generated by the services that support the mining process.

NON-MINERAL WASTE

Non-mineral waste is waste material that is not generated from the mineral ore, for example redundant chemicals, conveyor belts, domestic waste, wood pallets, building rubble, scrap materials, used oils and lubricants from maintenance activities. If waste is not stored and treated properly, it has a negative impact on the environment, as well as on the health and safety of the employees.

The aim of managing waste at the mine is to promote the '3Rs' to ensure that waste generated onsite is reused, recycled, recovered and disposed of in accordance with Rössing standards, applicable laws, regulations, best practices and permit conditions.

The waste management contract was revised and an integrated waste contractor was appointed in December 2018. The contractor will handle all recyclable types of waste streams generated onsite such as scrap metal, wooden pallets and packaging materials (including paper, plastic and metal containers).

During the reporting year, a total of 1,419 tonnes of recyclable waste material (mainly used oil and scrap metal) were removed from site by the contractor to the offsite recyclers. The contractor transported the domestic waste from the mine site to the Swakopmund waste sorting facility before it was dispatched to Windhoek for recycling and re-use purposes at the contractor's refuse derived fuel plant. The domestic materials that are non-recyclable were disposed of at the municipal landfill site of Swakopmund.

The contaminated waste included both radioactive and non-radioactive contaminated waste materials (such as empty paint containers, air filters and contaminated PPEs) that is generated from mining and the workshops. In the context of uranium mining, radioactive contaminated waste is regarded as any redundant material with a fixed or non-fixed surface contamination of alpha or beta exceeding 0.4 Bq/cm^2. Therefore, all types of waste streams generated from the Processing area are potentially radioactive contaminated and get disposed in the white lugger bins (may contain anything from discarded PPE, to metal and tools, to building rubble) which are destined for disposal at the TSF.

Medical waste generated onsite is transported from the mine site to a medical facility in Arandis before it is dispatched to Walvis Bay for incineration. During 2019, a total of 0.45 tonnes of medical waste was incinerated.

The type of hazardous waste generated onsite includes used oils, filters, greases, redundant chemicals, batteries and other items such as fluorescent tubes and e-waste. A total of 183 tonnes of used oil were sent offsite for recycling.

A project was initiated with the aim to remove all historical used oil that was regarded as potential radioactive contaminated. Repetitive sampling was done and samples were analysed at NECSA for "High Energy Gamma Analysis" and all the results were below the detection limit. This means that the used oil generated from the Processing Plant is not highly contaminated, as initially assumed. Therefore, Rössing entered into an agreement with an external waste recycler and 91.7 tonnes of used oil was successfully recycled without posing any risk of releasing radioactivity into other sectors.

During 2019, a total of 2,538 tonnes of contaminated solid wastes have been removed and disposed at the TSF, while a total of 211 tonnes of oil sludge soil was disposed at the sludge farm for bioremediation treatment.

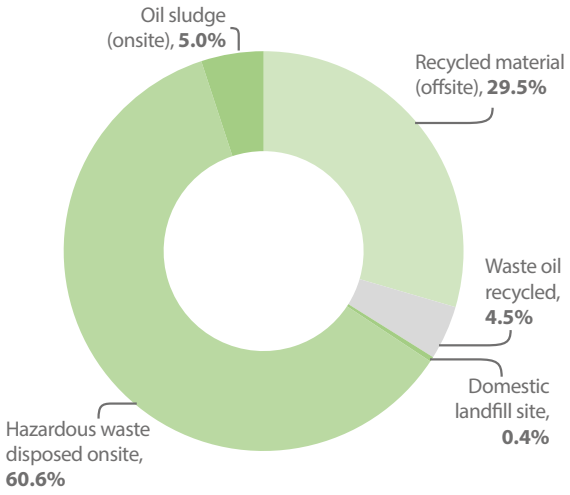
A total of 7.0 tonnes of e-waste was recycled with NamiGreen e-waste Namibia. No other hazardous waste streams generated from the Rössing site were disposed of at the Walvis Bay hazardous landfill site due to refurbishment that is underway. A total of 65,900 m^2 of external hazardous waste (asbestos roofing sheets) generated from the Arandis Roofing Project was safely disposed of at the hazardous landfill site in Walvis Bay.

Hazardous waste disposed offsite represents 7 per cent of non-mineral waste, compared with 93 per cent of radioactive waste disposed onsite.

MINERAL WASTE

During 2019, a total of 21.3 million tonnes of mineral waste were generated by the mine. This includes 8.0 million tonnes of tailings and 13.3 million tonnes of waste rock. At the end of December 2019, the total cumulative mineral waste stored onsite was 981 million tonnes of waste rock and 465 million tonnes of tailings.

Figure 20: Waste generated and disposed of, 2019
(percentage)



Tailings were deposited on the existing TSF, mainly in the deposition areas that were dormant for some years but reactivated in 2015. The rock waste was deposited on top of the existing rock dumps close to the open pit without the footprint being extended.

The footprint of the two mineral waste storage facilities has remained approximately the same size since 2016. They cover an area of 1,488 ha north-west of the Khan River.

LAND USE MANAGEMENT

The use of land during mining operations is unavoidable, though much can be done to limit its impact. Rössing's total footprint increased from 2,549.01 ha in 2018 to 2,552.38 ha in 2019. The tailings footprint increased from 742 ha to 746 ha, which is an extension by 4 ha.

Rössing is guided by the environmental biodiversity, rehabilitation and land-use management standard that requires a land-use management plan and a permit system to disturb land. The permit system allows Rössing's Environmental section to conduct an environmental impact assessment prior to disturbance. It is through the assessment that the plant species of conservation value such as *Adenia pechuelii*, *Commiphora* species and *Aloe namibensis* were rescued and replanted at the Namib Botanical Garden in Swakopmund in collaboration with the Ministry of Agriculture, Water and Forestry.

On 25 July 2019, a formal handover ceremony was hosted by CNNC for key stakeholders in Swakopmund, in celebration of the handover of Rio Tinto's Rössing Uranium mine to the China National Nuclear Corporation (CNNC). The event strengthened the cooperation relations between the Government of China and the Government of Namibia.

Corporate governance at Rössing Uranium

BUSINESS INTEGRITY STANDARD

The Rössing Uranium Board of Directors approved the Business Integrity Standard in September 2019, which will assist in ensuring that all employees, contractors and consultants are familiar with the company's basic integrity requirements with the standard as a guide to our everyday behaviour.

This standard is key in meeting the following business integrity commitments to:

- Prohibit bribery and corruption in all its forms;
- Avoid, disclose and manage conflicts of interest; and
- Prohibit fraud in all its forms.

Conducting business with integrity is one of Rössing's core values, viz. safety, teamwork, respect, integrity and excellence. This ensures that Rössing's reputation is protected and ensures a sustainable business with external stakeholders wanting to partner with a company that they can trust to do the right thing.

THE BOARD OF DIRECTORS

The Board of Directors executes the mandate they received from the shareholders to ensure that Rössing is a world-class, responsible company which assembled an executive team in place to achieve specific targets. The Board is furthermore responsible for ensuring that the company is run in accordance with the mandate outlined

in Rössing Uranium's Articles of Association, ensuring the various stakeholder interests are balanced and receive due attention.

Rössing Uranium has a unitary board and the roles of the Chairperson and Managing Director are separate and distinct. The current number and stature of the independent directors serving on the Board ensures significant decisions can be made with sufficient independence. The Board of Directors is constituted with the appropriate mix of skills, experience and diversity to serve the interests of the company and its stakeholders.

The members are listed in the table below.

FUNCTIONS OF THE BOARD

A Board Charter governs the functions of the Board of Directors, while the Nomination and Remuneration Committee monitors the Board's performance.

The Board adopts the corporate strategy, major plans of action and policies, and monitors operational performance. Its duties include identifying risks to the company's sustainability, as well as monitoring risk management and internal controls. It also oversees compliance management, corporate governance, business plans, as well as key performance indicators, including non-financial criteria and annual budgets.

The Board is also responsible for managing favourable and productive relationships with stakeholders. All directors bear full fiduciary responsibility and are obliged to exercise care in all company matters commensurate with their ability and skills. The Board meets quarterly, with additional meetings convened as required.

BOARD OF DIRECTORS AS AT 20 MARCH 2020

MEMBER'S NAME	ROLE
F L Namene	Chairperson, Independent Non-executive Director
J S Coetzee	Managing Director (Executive Director)
Y Li *	CNUC Namibia Mining Limited Shareholder Representative; Non-executive Director
Z Fang (alternate to Y Li) *	CNUC Namibia Mining Limited Shareholder Representative; Non-executive Director
H P Louw **	Independent Non-Executive Director
G N Simubali	Government of the Republic of Namibia's Shareholder Representative; Non-executive Director
C W H Nghaamwa (alternate to G N Simubali)	Government of the Republic of Namibia's Shareholder Representative; Non-executive Director
F Li *	CNUC Namibia Mining Limited Shareholder Representative; Non-executive Director

* Chinese ** South African

BOARD AUDIT AND RISK COMMITTEE

The Board Audit and Risk Committee was established as a sub-committee of the Board of Directors and acts in accordance with an approved mandate and terms of reference, and assists the Board of Directors to fulfil its oversight responsibilities relating to:

- the safeguarding of assets;
- the operation of adequate systems and control processes;
- the preparation of accurate financial reports and statements in compliance with all applicable legal requirements and accounting standards;
- the preparation of accurate and reliable operational reports and statements, which are in compliance with all applicable legal requirements and operational standards;
- Rössing Uranium's compliance to all relevant laws and regulations;
- Rössing Uranium's compliance with agreed-upon policies and procedures; and
- the effective implementation and compliance with the Rössing Uranium's risk management process.

In performing its duties, the Board Audit and Risk Committee maintains effective working relationships with the Board of Directors, management, the internal auditor(s), external auditor(s) and the other assurance provider(s) and shall be entitled to place reliance on the finding of any expert, which shall include the internal and external auditors.

NOMINATIONS AND REMUNERATIONS COMMITTEE

The Nomination and Remuneration Committee is appointed by the Board of Directors to assist in fulfilling its responsibility to the company's shareholders relating to the selection, nomination, performance, remuneration and succession of directors.

The Nomination and Remuneration Committee determines a remuneration structure for the Board of Directors and members of the sub-committees. The remuneration rates are subject to an annual review in February and any increases submitted to the Board of Directors for presentation to the Annual General Meeting for shareholder approval.

The primary purposes of the Nomination and Remuneration Committee are to:

- identify individuals who are qualified to become members of the Board of Directors;
- make recommendations to the Board relating to the nomination and selection of Directors;
- review the findings of performance assessments of Board members;
- ensure that appropriate procedures are used to assess the remuneration levels of the Chairperson, Non-Executive Directors, Board Committees and the Board as a whole;
- review the policy for executive remuneration and for the remuneration and benefits of individual Executive Directors;
- review the succession plans for Board members; and
- review reporting disclosures related to Nomination and Remuneration Committee activities to ensure these disclosures meet the Board's disclosure objectives and all relevant compliance requirements.

The functions of the Committee will remain flexible so that it can react to changing conditions effectively and assure the Board of Directors and shareholders that the company can attract, remunerate and retain directors of the highest quality.

SPECIAL PURPOSE VEHICLES

The company has established two special purpose vehicles, namely the Rössing Foundation and the Rössing Environmental Rehabilitation Fund, which are managed independently from Rössing Uranium by their own trustees. Members of Rössing Uranium's Board of Directors are among these trustees.

The Rössing Foundation was established in 1978 by Rössing Uranium through a Deed of Trust to implement and facilitate its corporate social responsibility activities within the communities of Namibia.

The trustees of the Rössing Environmental Rehabilitation Fund review the closure plans and trust funds to make provision for the eventual closure and rehabilitation of the mine site.

FINANCIAL STATEMENTS

The Directors are responsible for monitoring and approving the financial statements to ensure that they fairly present the company's affairs and the profits or losses at the end of the financial year. Independent auditors are responsible for expressing an opinion on the fairness with which these financial statements represent the financial position of the company.

Rössing Uranium's management prepares the financial statements in accordance with the International Financial Reporting Standards (IFRS) and in the manner which the Namibian Companies' Act (Namibian Companies Act (28) of 2004, amended 2011) requires. The statements are based on appropriate accounting policies that have been applied consistently, and supported by reasonable and prudent judgements and estimates.

THE CORPORATE GOVERNANCE CODE FOR NAMIBIA (NAMCODE)

Effective from 1 January 2014, Rössing Uranium accepted the NamCode, which is the Corporate Governance Code for Namibia, based on international best practices and the King Code of Governance for South Africa, 2009. Deviations from the NamCode are listed in the table below.

INDEPENDENCE OF EXTERNAL AUDITORS

The independent auditors, PricewaterhouseCoopers, audited Rössing Uranium's annual financial statements. The company believes that the auditors have observed the highest professional ethics and has no reason to suspect that the firm has not acted independently of the company. The Board Audit and Risk Committee has confirmed the independence of the external auditors for the reporting period.

Deviations from the NamCode	
NamCode 16.1: The Chairperson should be appointed by the Board every year after carefully monitoring his independence and factors that may impair his independence.	Rössing Uranium Articles of Association Art. 82: The Chairperson is elected for a period determined by the Directors. If no period is designated, the Chairperson shall hold office until otherwise determined by the Directors.
NamCode 16.10: There should be a succession plan for the position of the Chairman.	Nomination and Remuneration Committee: The need was to appoint a Deputy Chairperson but no appointment was made to date.
NamCode 18.3: The Board should comprise of a majority of Non-executive Directors, who should be independent as this reduces the possibility of conflicts of interest and promotes objectivity.	The current Board of Directors is composed of six directors of which five are Non-executive Directors. Only two of these are independent while three are shareholder representatives. This is as a result of the resignation of independent directors with their positions not filled to date.
NamCode 18.12: As a minimum two executive directors should be appointed to the board, the Chief Executive Officer (CEO) and a director responsible for the finance function (CFO). This will ensure that there is more than one point of contact between the board and management.	In line with a board decision to reduce its size, the Chief Financial Officer (CFO) is available at all meetings to answer questions and make presentations to the Board.
NamCode 26: Companies should disclose the remuneration of each individual director and certain senior executives.	The remuneration of Directors and senior management is disclosed to shareholders. Rössing Uranium does not propose to disclose this information to the public.
NamCode 27: Shareholders should approve the company's remuneration policy.	Remuneration is reviewed in detail by the Nomination and Remuneration Committee and approved in principle by shareholders.

COMPANY SECRETARY

The company secretary, Ms GD Labuschagne, is suitably qualified and has access to the company's resources to effectively execute her duties. She provides support and guidance to the Board in matters relating to governance and compliance practices across the company. All directors have unrestricted access to the company secretary.

RISK MANAGEMENT

Risk management is a fundamental part of the company's business. This is achieved by keeping risk management at the centre of the company's activities and by introducing a culture in which risk management is embedded in the everyday management of the business.

The Board acknowledges its overall responsibility for the process of risk management, as well as for reviewing its effectiveness.

Executive management is accountable to the Board for designing, implementing and monitoring the process of risk management, as well as integrating it with the day-to-day activities.

INTERNAL AUDIT

The internal audit function performs an independent appraisal activity with the full cooperation of the Board and management. It has the authority to independently determine the scope and extent of work to be performed. Its objective is to assist executive management with the effective discharge of their responsibilities by examining and evaluating the company's activities, resultant business risks and systems of internal control.

Its mandate requires it to bring any significant control weaknesses to the attention of management and the audit committee for remedial action.

As the company was in the process of changing internal auditors, in the window period it requested Deloitte Namibia to perform an analytical review on its payroll function, the result of which were presented to the Board Audit and Risk Committee.

INTERNAL CONTROL

Internal control comprises methods and procedures implemented by management ensure:

- compliance with policies, procedures, laws and regulations;
- authorisation, by implementing the appropriate review and approval procedures;
- reliability and accuracy of data and information (decision-making at Rössing Uranium needs to be grounded in accurate, timely, useful, reliable and relevant information);
- effectiveness and efficiency, which all operations at Rössing Uranium need to embody, using resources economically, while adding value to the economy; Rössing Uranium achieves this objective by continuously monitoring its goals and by embodying the credo, "that which is measured is controlled"; and
- safeguarding of assets, which need to be protected from theft, misuse or use for fraudulent or destructive purposes.

The directors are responsible for maintaining an adequate system of internal control. It is understood that such a system reduces, but cannot entirely eliminate, the possibility of fraud or error.

Assurance and list of references

Assurance

Our vision is to conduct our business with integrity, honesty and fairness at all times. We build from a foundation of compliance with relevant laws, regulations and international standards, and are in line with various Rössing Uranium guidelines on leading business practices.

Much of our work is subjected to various, external-assurance and verification processes throughout the year. For example, external auditors audit our financial statements, while an external, environmental-auditing company audits our environmental figures each year. The following auditing companies, Government bodies and other institutions reviewed the company's practices in 2019:

- PricewaterhouseCoopers (external audit)
- Deloitte Namibia (analytical review, Tip Offs Anonymous);
- Bureau Veritas (ISO 14001:2004 certification and Rössing Uranium HSEQ management system business conformance);
- International Atomic Energy Agency (industry control);
- AECOM and KnightPiesold (third party review of Tailings Storage Facility stability and design);
- Ministry of Labour and Social Welfare: Affirmative Action (Employment) Act, 1998 (No. 29 of 1998) (compliance verification in respect of labour-related Acts);
- Ministry of Health and Social Services (compliance verification in respect of health and related Acts);
- Ministry of Agriculture, Water and Forestry (compliance verification in respect of effluent management and water-related Acts);
- Ministry of Mines and Energy (compliance verification in respect of mining operation-related Acts); and
- Ministry of Finance (compliance verification in respect of income tax and finance-related Acts).

List of references

Rössing Uranium procurement principles

Business integrity standard

Data privacy standard

HSEC policy

Communities and social performance standard

Human rights policy

Risk management policy

Treasury policy

A Swakopmund-based Chinese contractor company, CNI 23, is contracted to do maintenance work on one of the acid storage tanks at the mine early in 2020, seen in the background. The company is one of many businesses supported by the mine.

Our value addition and summary annual financial statements

The motivation to do value-added reporting is linked to the overall process of disclosure regarding financial information. By sharing information about the value Rössing Uranium adds through its operations and business activities, the mine aims to bring into focus all aspects of the impact the company makes on the economy of the region in which it operates, as well as on the country's economy as a whole.

Our value-added statement (page 67) reflects the wealth created through the sale of our uranium oxide production, payments for services to suppliers, taxes to the Namibian Government, payments to employees and the investments made in Namibian communities.

How Rössing Uranium adds value

Sustainable development is underpinned by sustainable economies. Our continuing operations are based on our ability to secure access to land, people and capital. We use our economic, social, environmental and technical expertise to harness these resources and create prosperity for our stakeholders.

As a major employer and purchaser of goods and services, we make a significant annual contribution to economic development in the Erongo Region in particular, and to Namibia at large. Rössing Uranium gives rise to a significant 'multiplier effect' — the phenomenon whereby spending by one company creates income for and further spending by others.

Given the prevailing market conditions, our primary focus was to procure goods and services as cost-effectively and efficiently as possible and to focus on maximising our contribution to the local economy.

Despite the current financial strain under which we operate, Rössing's total expenditure for goods and services for our operations was N$2.72 billion during 2019 (2018: N$2.49 billion). As was the case during the previous reporting year, most of it was with Namibian-registered suppliers, amounting to N$2.03 billion (2018: N$1.9 billion), accounting for 75 per cent of our total procurement expenditure.

We spent N$373 million (2018: N$305 million) of total procurement with international suppliers, representing 14 per cent of our procurement expenditure, while we spent N$311 million with South African suppliers (2018: N$250 million), representing 11 per cent of our total expenditure.

Rössing Uranium remains committed to supporting local suppliers with the main focus on developing SMEs. The bulk of what we spend in Namibia remains in the Erongo (43 per cent) and Khomas (44 per cent) regions.

We invested N$26 million in Namibian communities during 2019, directly and through the Rössing Foundation.

The review period also saw us continue to demonstrate our value to Namibia through contributions to the fiscal authorities. Rössing Uranium paid the Government N$77.6 million in royalty tax, and N$154.5 million in pay-as-you-earn tax on behalf of employees. No corporate tax or dividends were paid in 2019.

Payments to public enterprises, such as NamWater and NamPower, amounted to N$450.1 million (2018: N$456.1 million), which includes the Vocational and Education Training levy of N$7.7 million paid to the Namibia Training Authority. We also spent N$612.7 million in net salaries and wages.

Preferential procurement and enterprise development

With the aim of securing economic growth, prosperity and the human dignity of all Namibians, the Government of Namibia developed the Harambee Prosperity Plan and the national, broad-based New Equitable Economic Empowerment Framework (NEEEF).

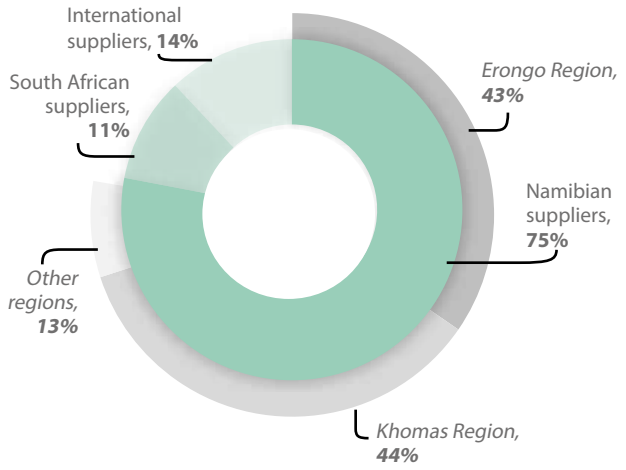
We remain committed to support Government development initiatives and policy frameworks. As such, we support local suppliers with the main focus on developing small- and medium-sized enterprises, equipping them with the necessary skills and knowledge to compete with international suppliers.

Our value addition

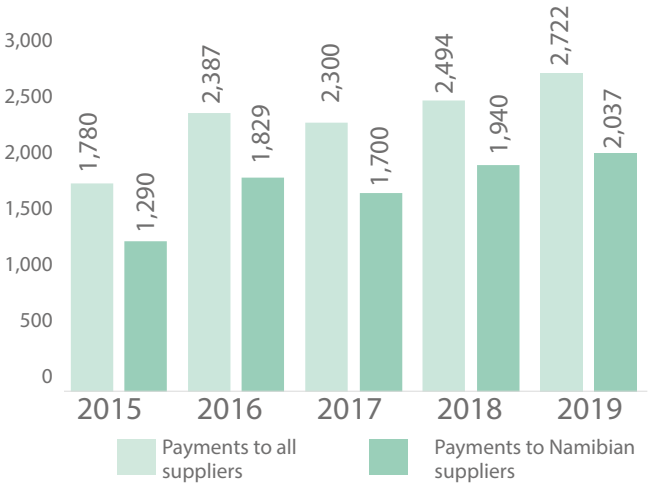
Summary of Rössing Uranium's value addition

Our business provides a strong base for economic growth in communities located in the Erongo Region and in Namibia as a whole. Our economic contribution comprises the value we add by paying wages, employee benefits and Government taxes and royalties, as well as by making dividend and interest payments, and by retaining capital to invest in the growth of the mine. In addition, we make significant payments to our suppliers for goods and services, both locally and nationally. The graphs below highlight some of the key socioeconomic contributions we have made to Namibia over the past five years, 2015 to 2019.

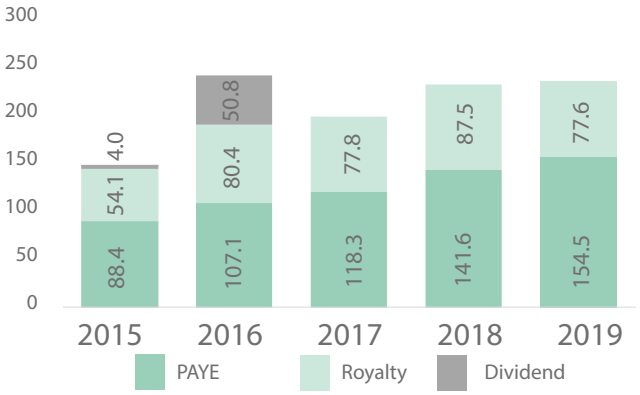
Distribution of Rössing Uranium's procurement expenditure, 2019 (percentage)



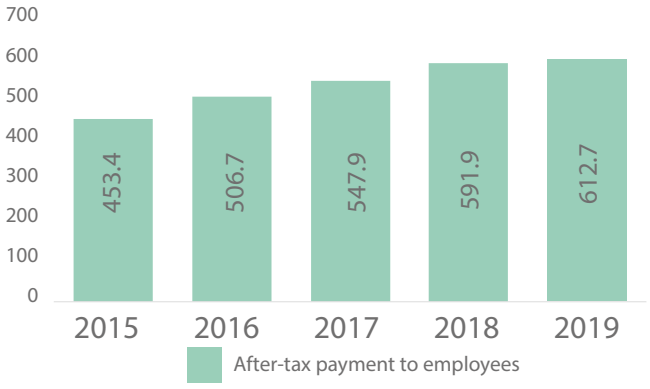
Payments to suppliers, 2015 to 2019 (N$ million)



Contribution to Government revenue, 2015 to 2019 (N$ million)

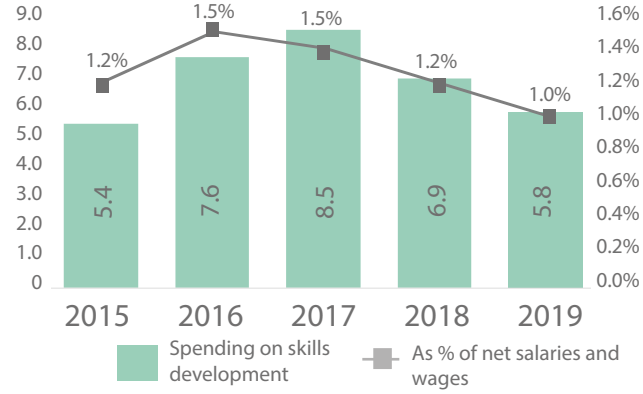


After-tax payments to employees, 2015 to 2019 (N$ million)



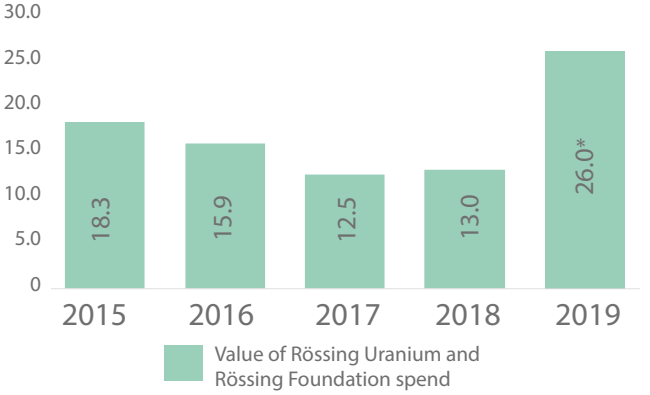
Contribution to skills development, 2015 to 2019

(N$ million and percentage)



Contribution to Namibian communities, 2015 to 2019

(N$ million)



** Includes N$13 million for the Arandis Roofing Project*

Our value addition

Stakeholders' Value Added Statement [1]	Notes	N$'000	N$'000 (Restated)	N$'000 (Restated)	N$'000 (Restated)	N$'000 (Restated)
For the year ended		**2019**	**2018**	**2017**	**2016**	**2015**
Turnover		2,684,574	2,835,698	2,695,803	3,070,853	1,841,012
Other income - sale of substitute concentrate / contract settlements		138,849	-	325,023	-	-
Stock movement of semi-finished and finished goods		919,397	211,000	(123,537)	(173,833)	(122,951)
Less: Purchased material and services from non-stakeholders		2,054,191	1,758,543	1,587,048	1,656,342	1,225,033
Total value added		**1,688,629**	**1,288,155**	**1,310,241**	**1,240,678**	**493,028**
Investment income		96,585	82,402	61,903	46,050	39,361
Release of foreign denominated cash		69,023	101,702	-	1,487,750	-
Total wealth created		**1,854,237**	**1,472,259**	**1,372,144**	**2,774,478**	**532,389**
Employees	1	767,289	733,504	693,259	613,842	541,761
Providers of equity capital		-	-	-	1,436,906	111,798
Providers of loan capital		-	-	-	-	-
Government	2	534,238	551,762	506,466	523,900	371,891
The Rössing Foundation		12,000	12,000	12,000	12,000	12,000
Reinvested in the Group	3	540,710	174,993	160,419	187,830	(505,061)
Total wealth distributed		**1,854,237**	**1,472,259**	**1,372,144**	**2,774,478**	**532,389**

[1] Stakeholders in this context: Shareholders, Government, lenders, employees and the Rössing Foundation

Notes to the Stakeholders' Value Added Statement

1. Employees	**767,289**	**733,504**	**693,259**	**613,842**	**541,761**
- Net salaries and wages	612,749	591,925	574,911	506,684	453,379
- Pay-as-you-earn (PAYE) taxes	154,540	141,579	118,348	107,158	88,382
2. Government	**534,238**	**551,762**	**506,466**	**523,900**	**371,891**
- Dividend	-	-	-	50,844	3,956
- Erongo Regional Electricity Distributor	949	1,262	1,701	2,008	2,372
- Mining royalty tax	77,590	87,511	77,833	80,352	54,132
- NamWater	148,147	145,890	136,887	128,680	101,129
- NamPost	-	-	-	-	-
- NamPort	2,828	2,731	2,551	2,740	2,271
- NamPower	265,211	277,560	257,389	232,043	178,852
- Rates, taxes and licences	224	320	231	1,388	3,239
- Namibia Training Authority	7,680	7,017	6,432	5,594	5,013
- Receiver of Revenue	-	-	-	-	-
Current tax	-	-	-	-	-
Export Levy	6,336	7,887	3,592	-	-
- Road Fund Administration	1,765	1,610	1,454	1,383	1,349
- Telecom Namibia	2,903	3,067	2,853	4,375	2,683
- TransNamib	20,605	16,907	15,543	14,493	16,895
3. Reinvested in the Group	**540,710**	**174,993**	**160,419**	**187,830**	**(505,061)**
- Depreciation	37,747	8,501	418,004	333,697	279,842
- Retained earnings	502,963	166,492	1,949	107,099	(384,780)
- Deferred stripping capitalised	-	-	(114,501)	(282,538)	(227,591)
- Deferred tax	-	-	(145,033)	29,572	(172,532)

Summary annual financial statements

COMPANY OPERATIONAL AND FINANCIAL REVIEW FOR THE YEAR ENDED 31 DECEMBER 2019

Financial performance
Revenue was in line with 2018, however a 15% reduction on operating costs had a positive impact on the profit before tax. The reduced costs largely contributed to an improved net profit after tax from normal operations of N$503 million (2018: N$166 million). Further details of the company's financial performance are set out in the summary statement of comprehensive income.

Operations
Production of uranium oxide for the year was 2,449 metric tonnes compared to 2,479 metric tonnes in 2018. A total of 22,411,993 metric tonnes (2018: 19,789,315 metric tonnes) were mined from the open pit and 8,006,058 metric tonnes (2018: 8,851,288 metric tonnes) of ore were milled. The mine is currently operating on an approved Life-of-mine Plan to 2026 (2018: 2025).

Dividends
No dividends were declared during the year (2018: No dividends declared).

Holding company and ultimate holding company
The company's immediate holding company is CNUC Namibia Mining Limited (previously Skeleton Coast Diamonds Limited, name changed effective 15 August 2019), a company registered in Namibia. China National Nuclear Corporation Limited, registered in China, is the company's ultimate holding company.

In November 2018, the preceding ultimate holding company, Rio Tinto plc, announced that a binding agreement was signed with China National Uranium Corporation Limited for the sale of its entire 68.6% stake in Rössing Uranium Limited. China National Uranium Corporation Limited is a subsidiary of China National Nuclear Corporation Limited. On the 16th of July 2019, the sale process was concluded and ownership transferred to the new ultimate majority shareholder, China National Nuclear Corporation Limited.

Subsequent events
During the period 27 February 2020 to 4 March 2020, global markets experienced considerable turmoil, resulting in a significant devaluation of the Namibian Dollar against the United States Dollar. While this is a non-adjusting event to the financial numbers as at the balance sheet date, the potential impact of and exposure to considerable exchange rate fluctuations to the financials is disclosed in note 15. There were no other subsequent events to report as at date of issue of the audited financial statements.

Auditors opinion
The summary results for the year ended 31 December 2019 have been audited by PricewaterhouseCoopers. The auditor's unqualified opinion is available for inspection at the company's registered office.

Directors
F L Namene (Chairman), J S Coetzee (Managing), Y Li** (alternate Z Fang**), F Li**, G N Simubali (alternate C W H Nghaamwa), H P Louw*.
*South African **Chinese

Company secretary
G D Labuschagne
PO Box 22391
Windhoek

Auditors
PricewaterhouseCoopers
PO Box 12
Walvis Bay

SUMMARY ANNUAL FINANCIAL STATEMENTS (continued)

SUMMARY STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2019

	Notes	Audited 2019 N$'000	Audited 2018 N$'000
ASSETS			
Non-current assets		**1,540,801**	1,181,165
Property, plant and equipment	6	**315,966**	116,236
Defined benefit pension asset		**236,411**	215,105
Derivative	7	**-**	4,639
Rössing Environmental Rehabilitation Fund asset		**988,424**	845,185
Current assets		**3,653,073**	2,982,902
Inventories	8	**1,875,371**	924,029
Trade and other receivables		**179,546**	181,285
Derivative	7	**167,786**	10,631
Cash and cash equivalents	9	**1,078,708**	1,508,171
Restricted cash	9	**351,662**	358,786
Total assets		**5,193,874**	4,164,067
EQUITY AND LIABILITIES			
Equity		**2,199,777**	1,530,940
Share capital		**223,020**	223,020
Retained earnings		**1,976,757**	1,307,920
Non-current liabilities		**1,521,085**	1,386,431
Deferred tax liabilities		**-**	-
Provision for closure and restoration costs		**1,502,919**	1,369,707
Post-employment obligation		**18,166**	16,724
Current liabilities		**1,473,012**	1,246,696
Bank overdraft	9	**262,439**	282,255
Trade and other payables		**1,210,573**	964,441
Total equity and liabilities		**5,193,874**	4,164,067

SUMMARY STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2019

	Share capital N$'000	Retained Earnings N$'000	Total N$'000
Balance at 1 January 2019	**223,020**	**1,307,920**	**1,530,940**
Total comprehensive income and expenses	-	**668,837**	**668,837**
Dividends paid	**-**	**-**	**-**
Balance at 31 December 2019	**223,020**	**1,976,757**	**2,199,777**
Balance at 1 January 2018	223,020	803,379	1,026,399
Total comprehensive income and expenses	-	504,541	504,541
Dividends paid	-	-	-
Balance at 31 December 2018	223,020	1,307,920	1,530,940

SUMMARY ANNUAL FINANCIAL STATEMENTS (continued)

SUMMARY STATEMENT OF COMPREHENSIVE INCOME AND EXPENSES FOR THE YEAR ENDED 31 DECEMBER 2019

		Audited	Audited
		2019	2018
Continuing operations	**Notes**	**N$'000**	N$'000
Revenue		**2,823,423**	2,835,698
Other income		**18,310**	46,179
		2,841,733	2,881,877
Operating costs		**(2,243,354)**	(2,646,181)
Depreciation, amortisation and impairment charges		**(37,747)**	(8,501)
Other net gains		**168,517**	210,012
Royalties - mining		**(77,590)**	(87,511)
Operating profit		**651,559**	349,696
Finance income	4	**96,585**	82,402
Finance costs	4	**(103,727)**	(87,166)
Profit before income tax		**644,417**	344,932
Income tax	5	**(211)**	(3,704)
Other comprehensive income for the year			
Actuarial gains on defined benefit pension asset		**24,631**	163,313
Total comprehensive income for the year attributable to equity holders of company		**668,837**	504,541
Reconciliation of total comprehensive income for the year to net profit after tax from normal operations			
Total comprehensive income for the year as above		**668,837**	504,541
- Actuarial gains on defined benefit asset		**(24,631)**	(163,313)
- Forex loss / (gain) on Kalahari and Extract funds		**11,273**	(159,466)
- Forex (gain) / loss on Derivative Financial asset		**(152,516)**	(15,270)
Net profit after tax from normal operations		**502,963**	166,492

SUMMARY STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2019

Cash flows from operating activities			
Cash (utilised) / generated by operations		**(141,263)**	(63,336)
Interest received	4	**29,261**	24,155
Interest paid	4	**(14,696)**	(4,869)
Tax paid	5	**(211)**	(3,704)
Net cash (utilised) / generated by operating activities		**(126,909)**	(47,754)
Cash flows from investing activities			
Purchases of property, plant and equipment	6	**(193,296)**	(76,483)
Decrease in investment in Rio Tinto Finance Ltd.		**-**	968,658
Proceeds from sale of fixed assets		**1,646**	11,604
Contributions made to Rössing Environmental Rehabilitation Fund		**(75,915)**	(68,888)
Net cash (utilised) / generated from investing activities		**(267,565)**	834,891
Cash flows from financing activities			
Dividends paid		**-**	-
Net cash utilised by financing activities		**-**	-
(Decrease) / increase in cash and cash equivalents		**(394,474)**	787,137
Cash and cash equivalents at beginning of year		**1,584,702**	630,890
Effects of exchange rate changes on cash and cash equivalents		**(22,297)**	166,675
Cash and cash equivalents at end of year	9	**1,167,931**	1,584,702

SUMMARY ANNUAL FINANCIAL STATEMENTS (continued)

NOTES TO THE SUMMARY ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2019

1. Reporting Entity

Rössing Uranium Limited is a company domiciled in the Republic of Namibia. These are the summary annual financial statements of the company as at and for the year ended 31 December 2019. The audited annual financial statements of the company as at and for the year ended 31 December 2019 are available upon request from the company's registered office.

2. Statement of compliance

These summary annual financial statements have been prepared in accordance with the framework concepts and the measurement and recognition requirements of IFRS and disclosure requirements of IAS 34, Interim Financial Reporting and the requirements of the Company's Act of Namibia. They do not include all of the information required for full annual financial statements, and should be read in conjunction with the annual financial statements of the company as at and for the year ended 31 December 2019.

3. Significant accounting policies

The accounting policies applied by the company in these summary annual financial statements are the same as those applied by the company in its annual financial statements as at and for the year ended 31 December 2019. The company has adopted IFRS 16 Leases retrospectively from 1 January 2019, but has not restated comparatives for the 2018 reporting period, as permitted under the specific transition provisions in the standard. In applying IFRS 16 for the first time, the company has used the practical expedient permitted by the standard for accounting for operating leases with a remaining lease term of less than 12 months as at 1 January 2019, as short-term leases. In all other aspects, the accounting policies and methods of computation applied in the preparation of the summary consolidated financial report are consistent with those applied for the period ended 31 December 2018.

	2019	2018
4. Finance income and costs	**N$'000**	N$'000
Finance income - Rehabilitation fund - Capital growth	**67,324**	58,247
Interest income - Bank balances	**29,261**	24,155
Finance income	**96,585**	82,402
Interest expense - Bank borrowings	**(14,696)**	(4,869)
Provisions - unwinding of discount - non-cash item	**(89,031)**	(82,297)
Finance costs	**(103,727)**	(87,166)
5. Taxation		
Namibia - current taxation	**-**	-
Namibia - deferred taxation	**-**	-
	-	-
US Federal tax charge - 2017	**-**	3,704
Penalties and interest on US Federal tax charge	**211**	-
	211	3,704

SUMMARY ANNUAL FINANCIAL STATEMENTS (continued)

NOTES TO THE SUMMARY ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2019

	2019	2018
	N$'000	N$'000
6. Property, plant and equipment		
Net book value at beginning of the year	**116,236**	26,944
Additions	**193,296**	76,483
Disposals	**-**	-
Depreciation charge	**(37,747)**	(8,501)
Impairment loss	**-**	-
Closure cost adjustment	**44,181**	21,310
Net book value at end of the year	**315,966**	116,236

No impairment charge was incurred during 2019, nor was there sufficient evidence to indicate a reversal of previous impairments. In 2017, the continued decline in the uranium spot price, combined with the increasing exposure of production to the spot market and a strengthening local currency against the US Dollar, indicated the carrying value of property, plant and equipment unsupported by future cash flows and the asset's value in use. This resulted in an impairment loss amounting to N$ 3 267 542 564 recognised in 2017 against the property, plant, equipment and intangible assets, as well as a further N$ 36 583 353 against long-term inventory (refer to Note 8).

The Value in Use was used as the recoverable amount for the cash generating unit, which comprises the business as a whole, to determine the impairment. The net present value of future cash flows was used to determine the value in use, which in 2019 is estimated at a value of negative N$ 280 800 000 (2018: N$ Nil) at a year-end exchange rate of USD/NAD 14.04 (2018: USD/NAD 14.43) using a discount rate of 10.0% (2018: 7.7%) and a closure discount rate of 2% (2018: 2%).

7. Derivative		
Opening balance at beginning of the year	**15,270**	-
Initial recognition of forward exchange contract	**-**	253,772
Fair value gains / (losses) through profit or loss - after initial recognition	**152,516**	(238,502)
Closing balance at end of the year	**167,786**	15,270
Forward exchange contract – non-current	**-**	4,639
Forward exchange contract – current	**167,786**	10,631
	167,786	15,270
Amounts recognised in profit or loss:		
Fair value gains / (losses)	**152,516**	15,270
Realised foreign exchange gains / (losses)	**51,767**	7,825
	204,283	23,095

On 15 November 2018 the company concluded hedging contracts in line with the proposed strategy as approved by the Board. Monthly lots of USD 12 500 000 were converted during 2019 at increasing rates and will continue up to the last trade on the 1st of December 2020. An average rate of USD/NAD 14.7998 was achieved for 2019 and an average rate of USD/NAD 15.4907 will be achieved for 2020. The hedge transaction is secured against USD 30 000 000 collateral on short term call deposits.

SUMMARY ANNUAL FINANCIAL STATEMENTS (continued)

NOTES TO THE SUMMARY ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2019

	2019	2018
	N$'000	N$'000
8. Inventories		
Inventories are stated after		
- Providing for obsolescence and impairment		
- raw materials obsolescence	**29,236**	29,105
- long-term work-in-progress impairment	**36,583**	36,583
9. Cash and cash equivalents		
Cash at bank and in hand (Note 9.1)	**501,430**	481,749
Bank overdraft (Note 9.1)	**(262,439)**	(282,255)
Short term call deposit (Note 9.2)	**577,278**	1,026,422
Restricted cash – Rio Tinto sales agreement guarantee (Note 12)	**70,175**	72,150
Restricted cash – Iran Foreign Investment Company (Note 9.3)	**281,487**	286,636
	1,167,931	1,584,702

For the purpose of the statement of cash flows the year-end cash and cash equivalents comprise the above.

9.1 Cash at bank and overdraft

The company deposits cash surpluses only with major banks of high-quality credit standing. The overdraft is unsecured.

9.2 Short term call deposit

Investment in call deposit	**1,026,422**	968,658
Drawdown of funds	**(437,871)**	(101,702)
Forex (loss) / gains on funds	**(11,273)**	159,466
Closing balance	**577,278**	1,026,422

9.3 Restricted cash – Iran Foreign Investment Company

The restricted cash relates to historic dividends that are payable to the Iran Foreign Investment Company shareholder. The transfer of the funds was restricted in terms of UN Security Council Resolution 1929. The board is actively investigating the potential payment of these dividends within the legal ambit of the remaining sanctions on the restriction. In November 2019 the funds were converted to a deposit denominated in Euro at the request of the shareholder and was valued at EUR 18,004,351 on date of conversion. The EURO deposit remains under control of the company, has a maturity date of 18 November 2020 and earns interest at 0.15% per annum. This interest accrues to the shareholder.

10. Capital commitments

Capital expenditure contracted but not yet incurred as at 31 December	**42,083**	59,811

SUMMARY ANNUAL FINANCIAL STATEMENTS (continued)

NOTES TO THE SUMMARY ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2019

11. Unconditional purchase obligations

During 2019 the company entered into a new desalinated water off-take agreement with NamWater. The agreement included the provision of a bank guarantee of N$12,551,181 (2018: N$14,736,218). The updated off-take agreement is valid until 25 December 2020.

12. Guarantees

In 2017 the company entered into an amended marketing arrangement with Rio Tinto Marketing Singapore Pte (RTU). The arrangement allows for more flexibility regarding the delivery on sales commitments through a margin scrape mechanism whereby RTU could be instructed to buy and sell material on behalf of the company and only remitting the margin scrape differential on the transaction to the company. In order to facilitate this arrangement, the company issued a financial guarantee to RTU of USD5,000,000 with a value at year end of N$70,175,439 (2018: N$72,150,072) in terms of the requirements of the amended agreement. The hedge transaction is secured against USD30,000,000 collateral on short term call deposits (refer Notes 7 and 9).

13. Related parties

The company is controlled by CNUC Namibia Mining Limited (previously known as Skeleton Coast Diamonds Limited, name change effective 15 August 2019) which owns 68,6% of the company's issued shares. The remaining 31,4% of the shares are widely held and includes a 3.4% shareholding by the Government of Namibia. The ultimate holding company is China National Nuclear Corporation Limited, a company registered in China. All other subsidiaries of China National Nuclear Corporation Limited are regarded as related parties. Transactions with Rio Tinto group companies are shown up to the divestment date of 16 July 2019. The following transactions were carried out with related parties:

	2019	2018
Summary of related party transactions	**N$'000**	N$'000
Sales to related parties	**556,572**	2,835,698
Other income from related parties	**131,377**	-
Purchase of product and services	**65,164**	79,811
Receivables from related parties	**27**	1,679
Payables to related parties	**364,271**	117,375
Transactions with Government, state-owned and semi-state-owned enterprises	**534,238**	551,762

14. Fair Value of Financial Instruments

At 31 December 2019, the carrying amounts of cash and short-term deposits, trade accounts receivable, trade accounts payable, accrued expenses and current interest-bearing borrowings approximated fair values due to the short-term maturities of these assets and liabilities. The carrying value of the non-current and current derivative approximates fair value as foreign currency forward contracts are valued using the present value of future cash flows based on forward exchange rates obtained from financial institutions at the balance sheet date. The derivative (refer to Note 7) is categorised as level 2. All other financial instruments are categorised as level 3.

SUMMARY ANNUAL FINANCIAL STATEMENTS (continued)

NOTES TO THE SUMMARY ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2019

15. Market risk - foreign exchange risk

The company is exposed to foreign exchange risk arising from various currency exposures, primarily to the US dollar and British Pound. Foreign exchange risks arise when future commercial transactions or recognised assets or liabilities are denominated in a currency that is not the entity's functional currency. Derivatives are only used for economic hedging purposes to hedge the foreign exchange risk against the functional currency and not as speculative instruments. Where derivatives do not meet the hedge accounting criteria, it is classified as "held for trading" for accounting purposes and are accounted for at fair value through profit or loss. Derivative financial instruments are presented as current assets or liabilities to the extent that they are expected to be settled within 12 months after year-end. At 31 December 2019, if the currency had weakened by 10% against the US dollar with all other variables held constant, post-tax profit for the year would have been N$128,785,893 (2018: N$259,861,344) lower as a result of foreign currency losses on the valuation of the derivative and the derivative would have been a liability of N$38,271,318 (2018: N$400,508,353 liability).

At 31 December 2019, if the currency had weakened /strengthened by 10% against the US dollar with all other variables held constant, post-tax profit for the year would have been N$52,190,109 (2018: N$91,850,682) higher/lower, mainly as a result of foreign gains or losses on translation of the US denominated inter-company receivables, trade receivables and cash equivalents.

Performance data table

	2019	2018	2017	2016	2015
Employees					
Number of employees	1,000	967	956	949	948
Production					
Uranium oxide produced (tonnes)	2,449	2,479	2,110	1,850	1,245
Ore processed ('000 tonnes)	8,006	8,851	9,000	9,194	6,876
Waste rock removed ('000 tonnes)	13,300	11,459	15,110	16,467	12,471
Ratio of ore milled to waste rock removed	0.60	0.77	0.63	0.56	0.55
Health, safety and environment					
New cases of pneumoconiosis	0	0	0	0	0
New cases of dermatitis	0	0	0	0	0
New cases of hearing loss	0	0	1	0	0
New cases of chronic bronchitis	0	0	0	0	0
All-injury Frequency Rate (AIFR)	0.49	0.83	0.39	0.82	0.74
All-injury Frequency Rate (AIFR) target	0.61	0.35	0.67	0.68	0.72
Number of Lost-day injuries	2	7	3	5	7
Source dust levels at Fine Crushing Plant (mg/m^3)	0.30	0.05*	2.37	1.81	1.25
Freshwater consumption ('000 m^3)	2,578	2,883	2,998	2,654	2,103
Freshwater usage per tonne of ore milled (m^3/t)	0.32	0.33	0.33	0.29	0.30
Ratio of fresh water:total water	0.33	0.36	0.40	0.38	0.36
Seepage water collected ('000 m^3)	2,097	2,703	2,083	2,407	2,206
Energy use onsite (GJ x 1,000)	1,297	1,193	1,321	2,528	1,777
Energy use per tonne of ore processed (MJ/t)	162.0	134.7	147.46	137.03	129.25
CO_2 total emission (kt CO_2 equivalent)	151.4	148.7	157.44	150.06	106.87
CO_2 equivalent emission per tonne of production (e/t uranium oxide)	61.86	60.04	74.20	81.81	85.87
Product and customers					
Uranium spot market price (US$/lb) (average)	25.91	24.59	22.16	25.64	36.55

* These measurements were done with PM_{10} (real-time) instruments which differs from the gravimetric sampling instruments that were used in previous years.

Rössing Uranium's production of uranium oxide and the nuclear fuel cycle

Uranium is a relatively common element that is found in the earth all over the world, mined in many countries and processed into yellow cake, that is, uranium oxide (U_3O_8). Uranium oxide has to be processed before it can be used as a fuel for a nuclear reactor, where electricity is generated to produce heat and steam in order to drive a turbine connected to a generator.

Rössing Uranium's operations

1. Drilling and blasting
Through drilling, blasting, loading and hauling, the uranium ore at Rössing Uranium is mined. Due to the erratic distribution of minerals in the ground, waste and ore are often mixed. Radiometric scanners measure the radioactivity level of each truckload, determining whether the material is sent to the primary crushers or to the stockpiles. Waste is transported to a separate storage area.

2. Crushing
Ore is delivered to the Primary crushers by haul trucks and then taken by conveyor to the coarse ore stockpile. It passes through a further series of crushers and screens until the particles are smaller than 19 mm. After weighing, the fine ore is stored.

3. Grinding
Wet grinding of the crushed ore by means of steel rods reduces it further to slurry with the consistency of mud. The four rod mills, which are 4.3 m in diameter, are utilised as required by production levels and operate in parallel.

4. Leaching
A combined leaching and oxidation process takes place in large mechanically agitated tanks. The uranium content of the pulped ore is oxidised by ferric sulphate and dissolved in a sulphuric acid solution.

5. Slime separation
The product of leaching is a pulp containing suspended sand and slime. Cyclones separate these components and, after washing in roto scoops to remove traces of uranium-bearing solution, the sand is transported via a sand conveyor to the Tailings Storage Facility.

6. Thickening
Counter-current decantation thickeners wash the slimes from previous stages. A clear uranium-bearing solution ('pregnant' solution) overflows from the thickeners, while the washed slime is mixed with the sands and pumped to the tailings area.

7. Continuous ion exchange
The clear 'pregnant' solution now comes into contact with beads of specially formulated resin. Uranium ions are adsorbed onto the resin and are preferentially extracted from the solution. Beads are removed periodically to elution columns. There the acid wash removes the uranium from the beads. The resulting eluate is a purified and more concentrated uranium solution.

8. Solvent extraction
The acidic eluate from the Ion exchange plant is mixed with an organic solvent which takes up the uranium-bearing component. In a second stage, the organic solution is mixed with a neutral aqueous ammonium sulphate solution which takes up the uranium-rich 'OK liquor'. The acidic 'barren aqueous' solution is returned to the elution columns.

9. Precipitation
The addition of gaseous ammonia to the 'OK liquor' raises the solution pH, resulting in precipitation of ammonium diuranate, which is then thickened to a yellow slurry.

10. Filtration
The ammonium diuranate is recovered on rotating drum filters as yellow paste, known as 'yellow cake'.

11. Drying and roasting
Final roasting drives off the ammonia, leaving uranium oxide. The final product is then deposited in metal drums. Neither ammonium diuranate nor uranium oxide are explosive substances.

12. Loading and dispatch
The drums of uranium oxide are dispatched and exported to overseas converters for further processing. At full capacity, the Processing Plant can produce 4,500 tonnes of uranium oxide each year. **This step completes the Rössing Uranium production process.**

Our customers' operations

13. Conversion
The uranium oxide is converted to uranium hexafluoride crystals. Conversion plants operate commercially in Canada, China, France, the UK, and the US. *

14. Enrichment
This step increases the concentration of the isotope uranium-235 (^{235}U) from its naturally occurring level of 0.7 per cent to higher levels required for nuclear reactors — about 3 per cent. *

15. Fabrication
Enriched uranium is converted into uranium dioxide, formed into solid cylindrical pellets, sealed in metal fuel rods, and bundled into fuel assemblies. *

16. Power generation
Fuel assemblies are loaded into nuclear reactors where the ^{235}U fissions, producing heat and steam used to generate electricity.
(*Photos: www.areva.com)

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